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A National Newspaper for Every Branch of the Industry

Automotive Daily News

CARS · SHOP EQUIPMENT · TRUCKS · AVIATION · PARTS · ACCESSORIES · TIRES

Vol. 13. No. 1762 — Entered as second class matter Aug. 27, 1925, Post Office, N. Y., N. Y., Under Act of March 3, 1879. — NEW YORK, THURSDAY, JUNE 30, 1932 — 5 Cents. $12 Per Year.

May Car-Truck Output In U. S. and Canada Totaled 193,370 Units

Total Shows Good Increase Over April and Reverses Trend of Past Years; June May Top May

Washington, June 29.—Combined production on new passenger cars and trucks in the United States and Canada during May totaled 193,370 units, according to the final official figures issued today by the Bureau of Census of the Department of Commerce. This total compares with an estimate of 190,000 to 195,000 made in Automotive Daily News May 31, and an earlier estimate of 190,000 made in this paper on May 4.

The Bureau of Census also announced a revision in its total for April this year, the new figure being 148,326, rather than the previously announced total of 148,013. These figures, of course, represent only the production in the United States. The total for Canada for April remaining at 6,810.

The May increase over April in the United States was accounted for largely by a sharp increase in the production of passenger cars, the passenger car totals in the United States comparing 120,906 for April and 157,683 for May. Trucks during the month showed a gain of only four units, the figures being 27,289 for April and 27,393 for May. The seasonal trend in past years has been the reverse of the present trend, with the peak production month

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CHRYSLER PROTESTS BURDENING FARMER WITH NEW MOTOR TAXES

Detroit, June 29.—In a recent statement, Walter P. Chrysler, chairman of the board of Chrysler Corporation, says that, "The farmer is the automobile industry's best customer.

"According to the lastest available census figures," continued the motor car manufacturer, "4,134,575 passenger cars and 900,385 trucks are operated on American farms. This represents 18.4 per cent. of all the passenger cars in use and 25.8 per cent. of the trucks. The interests of the automotive industry and of the farmer obviously are more closely allied than those of any other two groups of producers.

"We have opposed and will continue to oppose any discriminatory tax on motor vehicles and parts. The farmer, being the largest user of these vehicles, must inevitably be

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M. E. W. A. ELECTS 13 NEW MEMBERS

Chicago, June 29.—The addition of thirteen new members in various parts of the country was announced today at the headquarters of the Motor and Equipment Wholesalers Association here. The action to admit these firms was taken by the board of directors in conjunction with the M. E. W. A. summer conference of regional association rep-

(Continued on Page 2)

DRASTIC INDIANA TRUCK CONTROL LAWS EFFECTIVE TOMORROW

Indianapolis, Ind., June 29.—Plans are nearing completion by the state highway and police departments for the active enforcement of the 1931 truck weight and size limitation law and July 1 has been definitely set for the act to become effective.

Enforcement of the act, which would seriously affect interstate hauling across the state, was delayed six months by legal procedure which resulted in the issuance of a temporary restraining order enjoining the two state departments from enforcing the law January 1. It was held in the suit that the act would render obsolete a great volume of trucking equipment now in service and work hardships on truck operators.

The restraining order was dissolved several weeks ago and a permanent injunction denied when Superior Court Judge Russell J. Ryan upheld the constitutionality of the act.

Some of the principal points of the law are:

No vehicle shall exceed a total maximum width of eight feet, including the load.

No vehicle shall exceed a total maximum height, including any load thereon, of twelve feet.

No single vehicle shall exceed a length of thirty-three feet, and no combination of vehicles coupled together shall exceed a total length of forty feet. For the purpose of this act a semi-trailer shall be considered a separate unit.

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DODGE TRUCK SALES INCREASE STEADILY; LAST WEEK BEST IN YEAR

Detroit, Mich., June 29.—"The week ending last Saturday was the best week in retail deliveries we have had since July of last year," declares J. D. Burke, director of truck sales for Dodge Brothers.

"Our returns are all in now and show that, not counting fleet sales, our dealers actually delivered 314 units last week, 103 more than the previous week. It looks now as if

(Continued on Page 4)

May Truck Sales for Country 5.5% Above April; 38% Off From 1931

Georgia Figures Alone Missing From Complete Countrywide Report; Total for Month Put at 18,466 Units

Detroit, June 29.—R. L. Polk & Co. today gave a representative of Automotive Daily News commercial vehicle sales figures covering forty-seven states and the District of Columbia for the month of May. This completes the total for that month with the exception of the state of Georgia, which has not yet reported any figures for 1932. Georgia reports are expected some time during July, when the complete figures for the year so far can be compiled.

With this Georgia figure omitted commercial vehicle sales for the country in May totaled 18,466 units. This compares with 17,503 trucks sold in April and with 30,061 in May, 1931. The showing, as compared with April, is better than first returns suggested. The first few states to report showed commercial vehicle sales running behind April, but later returns brought out a very satisfactory increase.

May sales of commercial vehicle units are approximately 5.5 per cent. ahead of the April levels and about 38 per cent. off from those of May, 1931. In considering the general situation, the showing made by the commercial vehicle division in May is distinctly good.

BEECHER APPOINTED CHIEF ENGINEER OF THE GABRIEL COMPANY

Cleveland, O., June 29.—John J. Batterman, president of the Gabriel Company of Cleveland, announces the appointment of Eugene L. Beecher as chief engineer. Mr. Beecher has been with the Gabriel Company as research engineer. He was closely associated with the development of Gabriel Hydraulic Shock Absorbers, and the later development of the fully automatic-thermostatic Gabriel Hydraulic Shock Absorbers.

Previous to his association with Gabriel, Mr. Beecher was experimental engineer with the Westinghouse Air Spring and Air Brake Company. He was closely connected with the development of the Westinghouse air spring and air brake.

During the war, Mr. Beecher was

(Continued on Page 15)

ROCKNE DELIVERIES FOR FIRST 20 DAYS OF JUNE TOP MAY 25.3%

Detroit, Mich., June 29.—Rockne deliveries by dealers for the first twenty days of June exceeded by 25.3 per cent. deliveries for the first twenty days of May, F. L. Wiethoff, sales manager of Rockne Motors Corporation, reported today.

Wiethoff also announced that of the first forty states reporting to date on May registrations, twenty-five show Rockne ranking in tenth place or better among all makes of cars.

"Registrations for May show we were in fifth and sixth places in Nevada and Arizona, respectively, and in seventh place in California, Florida, Maryland, New Hampshire, North Dakota, Rhode Island and West Virginia," Wiethoff said. "In New Mexico, South Carolina, South Dakota, Vermont and Washington we were in eighth place and in ninth place in Alabama, Indiana, Iowa, Louisiana, Minnesota, Nebraska and Oregon.

"Rockne also ranked in tenth place among all makes in Idaho, Kansas, Kentucky and Oklahoma.

"We were first in May registra-

(Continued on page 15)

INTERNATIONAL OIL CONFERENCE TODAY

Paris, June 29.—The International Oil Conference, which collapsed in New York a month ago, will reopen here today.

JULY 4TH

Due to the July 4 holiday, Automotive Daily News will not be published for Tuesday, July 5. As a result, the first issue of Automotive Daily News next week will be Wednesday, July 6.

NEW YORK POLICE BRAKE SQUAD TESTS BRAKES FOR SAFETY

New York June 29.—The Police Department of New York city has established a Motor Vehicle Brake Squad. The duty of this squad is to test brakes to see if they comply with the law. Whenever there is an accident in which personal injury is involved, particularly if it is a death case, the police test the brakes of the vehicle involved. They use a decelerometer which gives the accurate test of the ability of the brakes to stop the vehicle at twenty miles per hour regardless of the speed at which the test may be made.

This instrument is calibrated by the Bureau of Standards, Washington, D. C., and is very accurate. It shows at the same reading the percentage and grade on which the brakes will hold the car to a standstill. The use of the decelerometer is frequently checked in practice by tests on the roadway. In this way all guess work is removed, and the police are able to tell accurately

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GENERAL MOTORS SETS FORTH PROCEDURE IN PRESENTING NEW DEVICE

New York, June 29.—General Motors has just issued a new booklet, superseding on published in 1929, setting forth the organization's methods of dealing with new devices which inventors and designers desire to submit to it. The booklet explains how to submit a device, the material that must accompany the offering, which must be made to the New Device Section, as follows:

The purpose of the New Device Section is to save the inventor's time and money in bringing his ideas before all of the people in the corporation who should consider the device. I ncarrying out this work the section also protects the corporation's own interest to make sure that no patentable device is overlooked which could be advantageously used. The complete information supplied by the inventor and collected from all available sources by the section staff is brought before the New Device Committee for final decision. The New Device Committee includes representatives

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PUBLIC HEARING ON BUS AND TRUCK IN VA. SET FOR JULY 25

Richmond, Va., June 29 (UP).—The state corporation commission has entered an order which designates July 25 at 10 o'clock as the time at which that body will hear any possible objectors who may desire to make a protest against a proposed schedule of rules governing the supervision by the commission of motor vehicle carriers in this state, it has been announced.

The series of regulations, having as their purpose the supervision and control of the motor vehicle carriers, has been drawn up by the commission in furtherance of the provisions of an act approved March 26, 1932, authorizing and directing

(Continued on Page 15)

OKLAHOMA TRUCK OPERATORS ORGANIZE

Oklahoma City, Okla., June 29 (UTPS).—Plans for establishment of a central headquarters office, from which will be directed the campaign designed to build into one compact unit for its own development the motor truck and bus industry of the state, have been completed by the executive committee of the Associated Motor Carriers of Oklahoma, Inc.

The new association is headed by Moss Patterson of this city, president and general manager of the Oklahoma Transportation Company. The executive committee chose as its executive secretary, Ray Atherton, who was manager of the

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A. D. N. Letter Contest Rules Broadened—See Page 4

May Car-Truck Output Totaled 193,370 Units

(Continued from Page 1)

usually falling in April. That the Ford return to production during this spring has been responsible for this change is readily apparent. Ford resumption late in 1927 brought about a similar condition in 1928, when the peak occurred in May rather than April.

Indications at the present time are that the Ford present schedule will be maintained well into July, and while no definite figures are as yet available, there are indications that the June production total will exceed May. Some of the May and early June increases may perhaps be attributed to efforts on the part of manufacturers and dealers to get under the tax barrier, which descended on the industry June 21. Whether or not the fact that the tax applies to all cars manufactured and sold after that date will influence the July and August schedules is not clear at present.

Reports of new models to come in the next month or so and statements from leading parts producers regarding commitments for August create a condition where one man's guess is as good as the other's.

A tabulation of the May production with comparative figures for previous months is as follows:

UNITED STATES

	Total	Passenger cars	Trucks & taxis
1930—			
May	420,027	360,928	59,090
1931—			
May	317,163	271,135	46,028
1932—			
Jan.	119,344	98,706	20,638
Feb.	117,418	94,085	23,333
March	118,959	99,325	19,634
April	*148,326	*120,906	*27,420
May	185,149	157,683	27,466
Total 5 months (Jan.-May)			
1930	1,864,074	1,574,888	289,186
1931	1,322,295	1,105,916	216,379
1932	689,196	570,705	118,490

*Revised.

CANADA

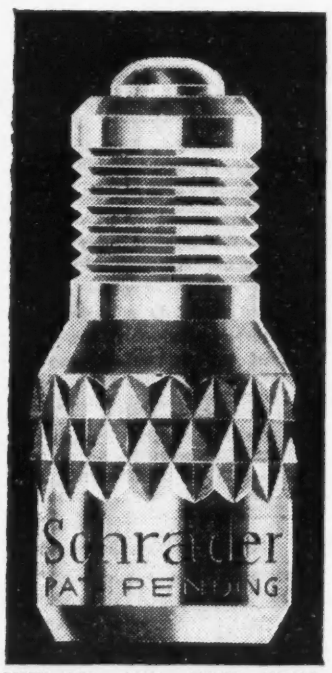
	Total	Passenger cars	Trucks
1930—			
May	24,672	21,251	3,421
1931—			
May	12,738	10,621	2,117
1932—			
Jan.	3,731	3,112	619
Feb.	5,477	4,494	983
Mar.	8,318	6,604	1,714
April	6,810	5,660	1,150
May	8,221	7,269	952
Total 5 months (Jan.-May)			
1930	95,595	81,165	14,430
1931	59,257	47,228	12,029
1932	32,557	27,139	5,418

DUTCH RUBBER

New York, June 29.—Dutch East Indies shipments of crude rubber increased during May to 19,422 tons, compared with 17,952 tons during April, and with 25,530 tons in May, 1931. The increase in the total was accounted for by larger rubber shipments from the East Coast of Sumatra, the rest of Sumatra and Borneo. Smaller quantities were exported by Java, Madoera and Celebes.

There is no let-up in the human desire for CONVENIENCE

And where there's Convenience there's usually Economy. Give the motorist or driver an easier way to keep tires properly inflated, and he will be less likely to neglect this very important requisite to maximum tire mileage.



INFLATE AND TEST PRESSURE THROUGH VALVE CAP. Four operations saved in inflating every tire.

The Schrader Dublchek Valve Cap has been designed for that very purpose. It does away with the usual valve cap and dust cap. Besides making inflation, deflation and air-gauging a tire a matter of seconds instead of minutes, it represents:

—A permanent cap that can't be lost.

—Guaranteed air-tightness up to 250 lbs. if affixed according to directions.

—An effective guard against dirt, dust and grit.

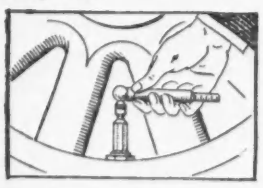
—A double check against loss of air.

FLEET OWNERS

will find Schrader Dublchek Valve Caps a highly profitable investment in tire economy and time saving. Obtainable through your regular source of supply.

SERVICE STATIONS AND ACCESSORY DEALERS

will find every motorist an easily interested prospect for Schrader Dublcheks. Order through your regular jobber. A. Schrader's Son, Inc., Brooklyn, Toronto, London—Makers of Pneumatic Valves since 1844.



TIRE VALVES **Schrader** TIRE GAUGES

Reg. U. S. Pat. Off.

DUBLCHEK VALVE CAP

BE SURE IT'S A SCHRADER—LOOK FOR THE NAME

M. E. W. A. ELECTS 13 NEW MEMBERS

(Continued from Page 1)

resentatives held in Chicago last week. The newly added members are as follows:

Bearings Parts and Supply Company, Augusta, Ga.; Fink Corporation, Savannah, Ga.; Motor Supply Company, Savannah, Ga.; Berrodin Auto Supply Company, Philadelphia; Lite Sales Corporation, New York city; S. B. Roby Company, Rochester, N. Y.; Bergan Auto Supply Company, Utica; Automobile Supply Company, Hazleton, Pa.; Baldwin Supply Company, Charleston, W. Va.; Williams Hardware Company, Minneapolis, Minn.; Motor Bearings and Parts Company, Raleigh, N. C.; E. Krieger & Son, Inc., Brooklyn, and Sarrar-Brown Company, Inc., Portland, Me.

FINANCIAL NEWS

FAILURES

New York, June 29.—The week ended June 23 marked a rise of 4.1 per cent. in number of failures reported to Bradstreet's. This is the more notable since a decrease of 15.4 per cent. is normally expected at this time. Hence, while failures increased in number only from 564 to 587, Bradstreet's index of weekly failures jumped sharply to 158.6, the highest point since the last week of April.

This compares with 128.9 in the preceding week, which was one of the low points of the year, 129.8 two weeks ago and 108.9 for the same week of 1931 (1928-30, 100).

CAR LOADINGS

Washington, June 29.—Loading of revenue freight for the week ended on June 18 totaled 518,409 cars, according to reports filed by the railroads with the American Railway Association and made public today. This was an increase of 16,649 cars above the preceding week this year, but 220,685 cars below the corresponding week in 1931 and 402,236 cars under the same period two years ago.

DOUGLAS AIRCRAFT

New York, June 29.—Douglas Aircraft, Inc., for the six months ended May 31 last, reports a net profit of $135,572 after depreciation, Federal taxes, etc., equal to 39 cents a share on 343,304 shares, as against $410,681, or $1.20 a share on 342,402 shares in the like period of the previous fiscal year.

BROCKWAY

New York, June 29.—Annual meeting of stockholders of Brockway Motor Truck Corporation has been postponed until July 5, it was announced yesterday.

ADVANCES TANK CAR GASOLINE

New York, June 29.—Standard Oil Company of New York, Inc., has advanced the tank car price of gasoline of 65 octane and higher 1 cent a gallon to 8½ cents, at New York Harbor and Providence, R. I., exclusive of taxes. This is the same price as quoted by Standard Oil Company of New Jersey.

A delightful, economical vacation . . .

This summer take a Great Lakes Cruise. Long days of sailing thru regions rich in beauty. Zestful meals. Restful deck lounging. Sports and dancing galore. You meet new friends, see new lands, sail home satisfied that you've had the best vacation in years.

9 day cruise BUFFALO DULUTH and Return **$80** INCLUDING MEALS AND BERTH S.S. OCTORARA S.S. JUNIATA FREQUENT SAILINGS

7 day cruise BUFFALO CHICAGO and Return **$67.50** INCLUDING MEALS AND BERTH S.S. TIONESTA STOPS AT ALL PRINCIPAL PORTS FREQUENT SAILINGS

GREAT LAKES TRANSIT CORPORATION

Frequent Sailings To and From

Buffalo (Niagara Falls), Cleveland, Detroit, Mackinac Island, Sault Ste. Marie, Houghton, Duluth, Chicago, Milwaukee

For full information apply any Tourist or Railroad Agent

SPARKS *from* DETROIT

Skipper Willys at Helm

* * *

Curt K. Brauns

* * *

The Old Guard Wanes

* * *

Seven Footers Stoop

* * *

Rockne Helps Out

* * *

Chris Sinsabaugh—Detroit Editor

WHEN it became generally known that John N. Willys was to resume control of Willys-Overland every one began predicting what was going to happen with the old master back at the helm. They sort of sensed things would start a-popping, and it begins to look as if they were right.

We here in Detroit get the aftermath of that famous welcome home party given John N. recently, for one of those who attended the Toledo banquet comes back full of optimism as to the Willys-Overland future. This is C. R. Wilson, president of the Wilson company at Pontiac, which makes the Knight engines for the Willys company.

Mr. Wilson told his fellow Rotarians the other day that by August his plant would be busier than at any other time in the past two and a half years; that John N. has big plans under foot, and that Pontiac is going to benefit by them.

* * *

COMPARATIVELY YOUNG, though a veteran so far as automobile advertising is concerned, the late Curt K. Brauns, manager of the Detroit office of the Chilton Class Journal Company, in the twenty years he spent in Detroit built up a friendship in the industry equaled by few. Intimate of Henry T. Ewald, C. C. Winningham and leaders of that type, he was something more than a business acquaintance—he was a friend.

I, too, was one of his old associates, along with Harry Tarantous, Ted Allen, Bill Stout and Dave Beecroft in the Motor Age days in Chicago. Curt represented us then in Detroit, but switched to the Automobile Trade Journal, a Chilton publication. When Class Journal and Chilton merged some ten years ago Curt carried on for the combined forces in this city.

So it is with an intimate knowledge not only of his business ability but his character as a man and a friend that I pay my humble tribute.

* * *

MORBID PERHAPS, but I cannot help commenting on how the old man with the scythe is making such heavy inroads in the ranks of the old guard, particularly in Chicago among those who made that city famous twenty years ago in the promotion of contests that did so much to establish the reliability of the automobile as a method of transportation.

Within the past three or four years Chicago has lost such leaders as Henry Paulman, Walter Githens, Harry Branstetter, Jack Banta and N. H. Van Sicklen, Sr., tradesmen who figured most prominently in the promotion of the early road races, reliabilities and hill climbs, as well as Sam Hibben, Clare Briggs, the cartoonist, and ex-Congressman Clifford Ireland, representing owners' interests in these promotions.

* * *

I AM GOING OUT of the Walter Winchell business, for something has happened right under my nose and I didn't know it until it was told me by Col. E. M. Lubeck. Henry Ford is building a brick wall six feet high and a mile long, shutting off the view of the road running alongside his famous Greenfield Village. This is being done so that the visitors cannot see the passing automobiles. The sage of Dearborn does not want to destroy the illusion of the prehorseless carriage age and is thus preserving the atmosphere of early America.

* * *

WE HAVE THE DEMOCRATIC convention with us this week in Chicago, so maybe I can tell of an incident that happened during the Republican conclave in which Rockne played a part.

When the Hoover forces planned the demonstration that was to be given when Herbert was actually nominated, it was discovered that they needed a big picture of the President to go with the movie picture stunt. None was available, but one of the committeemen who had been looking at a Rockne in the company's salesrooms in the Congress remembered there was a swell picture of Hoover on the walls there. It was immediately requisitioned and that's the picture that was the cynosure of all eyes when the prearranged demonstration took place in the convention hall.

Retail Salesmen—This Is Your Page

This department is devoted to the interests of the retail sales division of the industry. Salesmen, this is your department. Automotive Daily News wants you to get something from this department that will help you in your work on the firing line. It wants you to pass on your own experiences, successes, failures to help your brother salesmen. Send in your story in the form of a letter, or even a postal card, and let us get it ready for publication. Your achievement or your mistake may help another salesman to make sales or avoid errors that cost you commissions.

Dealers read this page. Give us the benefit of your reactions on these problems that affect the work of your salesmen, the men on the firing line, the men who bring home the bacon or don't.

MEETING YOUR CUSTOMERS ON THEIR OWN GROUND

Some years ago the "store on wheels," less euphoniously called by the jobbing trade "the wagon peddlers," began making their competition felt by automotive suppliers. This was true of the Automotive Supply Company of Visalia, Cal., and finally C. M. Burnett, the president, and William P. Nash, the secretary of this organization, made up their minds to meet the competition on its own grounds. Here is the way the story is told in the current N. S. P. A. bulletin:

"Therefore," said Mr. Nash, "we decided to make a thorough investigation into their manner of operation, their type of merchandising and their sales policies, and as a result we came to these conclusions:

"First, that in most cases they were selling for cash; secondly, that they carried many articles of standard makes, but for the most part the brands that they were selling were not regularly carried by the accessory and parts jobbers; thirdly, that their prices were generally no lower than those quoted by the average jobber, but it was a practice of theirs to make a price leader of some particular item as bait.

"With this information and the further fact that we believed we would get this business if we covered the same territory and offered the same service, and in addition gave them standard quality merchandise, we decided to give the thing a try.

"On April 1, 1928, we started our first sales truck. At that time we purchased a three-quarter-ton delivery and rebuilt it. We built sides on the truck that could be raised up, shelved the inside, paneled it, and, in fact, we figured it would be more or less a traveling billboard, and we did not hesitate to put some expense on the side of it, and make it an attractive thing. When we got through with it and opened it up it looked much like the old-fashioned huckster wagon. Everything was there where you could put your fingers on it.

"All the merchandise carried in our truck is sold from the same catalogue and at the same price as used by our regular salesmen, except that delivery is made at the time of the sale, and paid for in cash by the customers. The routes were so arranged that the driver could be home every night, and in ten daily trips cover our territory thoroughly, calling regularly on every customer every two weeks. This schedule gave our driver one day a week to take care of his truck, rearrange his stock, and at all times keep it clean and attractive.

"From January 2, 1929, until December 28, 1929, a period of one year, the truck traveled a total of 15,642 miles, made sales in the manner above stated totaling $14,550.12, of which amount $2,182 was automobile tubes, small ones, mostly to service stations, the balance being small parts and accessories, of which there was a total gross profit of $4,874.30. The total operating expense, including the truck driver's salary, expenses of the truck, gasoline, oil, truck repairs, depreciation, was $3,144. There was therefore a total net during the year from the truck sales of $1,730.12, which amount is quite acceptable to us, in view of the fact that it was practically 85 per cent. plus business, an entirely new venture on our part."

NEW SPARK PLUG LINE

Los Angeles, June 29.—The Acco Spark Plug Company, 423 West 18th St., started production on Acco Super-Flash spark plugs and has already secured considerable distribution in southern California. J. H. Allard is general manager of the new company.

GAMBILL OFFERS $50 SERVICE WITH USED CARS

Chicago, June 29.—Issuing of a "blue ribbon" certificate to used car purchasers, whereby they rate $50 worth of service during a period of six months, is announced by the Gambill Motor Company, Hupmobile distributor, through William Q. Lundmark, retail sales manager.

Lundmark states that the service includes mechanical adjustments, repairs, replacement parts, greasing and regular monthly inspection. He adds that the plan has proved of marked value in attracting used car purchasers and building up sales.

In addition, the Gambill Motor Company is stressing in its appeal the fact that "the used car prospect faces an ideal situation today, for by purchasing a reliable used car from a reputable dealer, he can be assured of trustworthy transportation over a long period of time and at an initial cost that would have been impossible even six months ago."

USES REGISTRATIONS IN LOCAL CAR ADS

Inglewood, Cal., June 29.—George M. Sutton, Ford dealer, Redondo Boulevard and Market Street, believes that at least a large enough part of newspaper readers are statistically minded to justify an occasional advertisement quoting statistics on car registrations.

Recently Dutton had an advertisement that was almost exclusively statistical. Occupying about four inches double column, the ad was captioned: "Ford Sales Jump Far Ahead." It said: "Actual automobile registrations taken from the Division of Motor Vehicles and published by Motor Fax show Ford far in the lead. The following registrations are from June 1 to June 10."

Then followed in bold type the Ford registration as to the state, southern California, Los Angeles county and Los Angeles city. This in turn was broken down as to fours and eights. Then, for comparative purposes, followed the registrations for the second highest and third highest cars.

Having put over the idea by quoting these figures, the ad concluded with: "Let us show you the beautiful new Ford," followed by Sutton's name and address.

UNITED AUTO TAKES GRAHAM IN BALTIMORE

Baltimore, Md., June 29.—The United Auto Sales Company, Inc., one of the oldest automobile houses in Baltimore, has been named distributor for Graham in this territory. The company, which is headed by F. R. French, recently became dealer for the De Soto and Plymouth and will continue to represent all three lines.

CHEVROLET MAKES ROYS ASSISTANT ZONE MANAGER FOR ST. LOUIS

St. Louis, Mo., June 29.—M. B. Roys, formerly of Little Rock, has been promoted to assistant St. Louis zone manager of the Chevrolet Motor Company, it was announced yesterday by A. W. L. Gilpin, regional manager.

Mr. Roys succeeds J. R. Wright, who has been promoted to assistant zone manager at Omaha, which is a part of the mid-west region under the supervision of Gilpin.

Mr. Gilpin also announced the promotion of O. E. Nonn, formerly of Decatur, Ill., to an official position in the St. Louis regional office.

ARKANSAS LICENSE FEES

Little Rock, Ark., June 29.—James Lawson, city tax collector, reports collection of $51,527 for city automobile licenses during the month of May.

YOU COULDN'T STOP THIS SALESMAN

We like to hear stories of salesmen who make the sale in spite of difficulties. And here is one for the book from the Buick Salesman's current issue:

Jess E. Ervin, a salesman for the Chattanooga Motors, Inc., Chattanooga, Tenn., had a prospect for a model 58 Buick. This possible customer lived at Cleveland, Tenn., about thirty miles from Chattanooga.

But there did not happen to be a 58 in the Chattanooga shop, and Mr. Ervin could not persuade his client to drive to Atlanta with him to look over the car. Many salesmen would have said, "Oh, heck, the luck's agin me," and let it go at that. But Ervin happens to be different.

Passing one of the Chattanooga hotels, he spied a 58 Buick standing by the curb. It had on North Carolina license plates, so the owner was evidently a tourist passing through, or a more or less transient visitor to the city. But did that bother Ervin? Not on your life.

He dived into the hotel and finally dug up the owner of the North Carolina car. He explained the situation to him and got his permission to drive the car to Cleveland for a demonstration.

Ervin was back in three hours with his customer's name on the dotted line.

And that's the spirit that wins.

PLAN RUBBER EXHIBIT

Los Angeles, June 29.—Plans are under way for a comprehensive display of rubber products manufactured in Los Angeles to be held in the Chamber of Commerce exhibit hall during August as a source of special information for Olympic games visitors, as well as for exporters and merchants and the general public.

CLASSIFIED ADVERTISEMENTS IN THE AUTOMOTIVE DAILY NEWS BRING RESULTS

TRUCKS that grind along in second or third when they should be "in high" are wasting your money. Ethyl Gasoline can stop this waste for *you*, as it has for hundreds of other truck users.

Ethyl Gasoline gets your truck through the gears faster on every start. Engine revolutions per trip are reduced—and that's what you really pay for in maintenance. Fleet owners who've made comparative tests over long periods of time have found that the savings well exceed the extra cost of Ethyl.

Gasoline mileage is improved by Ethyl—because engines that are using the direct drive don't turn over so fast, can't use as much gasoline. Engine overhauls and carbon removals are needed less frequently. Deliveries can be speeded up.

These advantages can be yours. Test Ethyl in your fleet—*one* truck using Ethyl won't show the full economy it makes in maintenance and lessened repairs except over long periods of operation. Ethyl Gasoline Corporation, Chrysler Bldg., New York City.

NO KNOCKING WITH ETHYL

The anti-knock standard of **Ethyl** Gasoline has recently been **raised** still higher. You now get **even** greater value for the slight extra **cost.**

ETHYL ANTI-KNOCK ETHYL GASOLINE CORPORATION Controls Combustion

GOOD GASOLINE + ETHYL FLUID = ETHYL GASOLINE

Ethyl fluid contains lead © E. G. C. 1932

Cut down engine revolutions per trip with

ETHYL GASOLINE

Automotive Daily News

"Of, By and For the Entire Automotive Industry"

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THURSDAY, JUNE 30, 1932

ADVERTISING AND BUSINESS HEADQUARTERS

Harry A. Tarantous, Business Manager, 350 Hudson St., New York, N. Y. George M. Slocum, Manager Detroit Bureau 427 Fisher Building, Detroit, Mich., phone Trinity 2-3500. Willard R. Cotton, Western Manager, 333 North Michigan Ave., Chicago, Ill., phone Andover 2400. Metz B. Hayes, New England Manager, Little Building, Boston, Mass. Blanchard, Nichols & Coleman, American National Bank Building, San Francisco, Cal.; Lincoln Building, Los Angeles, Cal.; 1037 Henry Building, Seattle, Wash.
Address ALL Advertising and business correspondence to 350 Hudson St., New York city

EDITORIAL DEPARTMENT

350 Hudson St., New York, N. Y. Telephone CA nal 6-1000.
Alexander Johnston, Editor. William C. Callahan, News Editor
Statistical Department (registrations and specifications), P. J. Robas, statistician. Engineering Department, A. Benson Carleton, technical editor. Merchandising Department, Charles S. Zack, editor. Art Department, John Bauerfeld, director.
Detroit Bureau, Chris Sinsabaugh, editor, 427-8 Fisher Building, Detroit, Mich. Telephone Trinity 2-3500. Contributing editor, John C. Wetmore.

Self-Denial and Depression

ECONOMISTS and financial experts have given us many reasons for the present depression and its ghastly length; they have offered us many cures for our ills. Some of them think we need credit expansion, a lot of them beg for inflation, others beseech us not to inflate and still others point to the gold standard as the foundation stone of human happiness.

But when we come to dig right down to fundamentals, we find old human nature at the bottom of it all.

In 1929 human nature enjoyed one of its flamboyant moods. Poverty had been abolished. Life was to be lived on a new scale of satisfied wants forever after. Mass production had brought mass consumption, and the answer was an era of prosperity with chickens in every pot, two cars in every garage. The automotive industry is beginning to wonder if those two slogans have not been merged into "chickens in every garage," but let that pass.

After its period of drunkenness on the heady wine of prosperity, human nature suffered the inevitable reaction. The stock market crash of 1929 signaled the end of the dream. But, as the action had been a violent fit of universal prosperity, so the reaction was correspondingly violent. As nothing had been too good to believe in 1929, so nothing since has been too bad to find ready credence.

The comparison of our unrestrained joy in 1929, with the drab months of the years that followed, has made our misery seem all the deeper. The saying so frequently heard after the first crash that the "country is fundamentally sound" was actually true, but by our actions we have proved that we did not believe it.

There began a period when self-denial became a positive virtue, instead of a passing need. We have denied and denied and denied ourselves almost everything we have wanted because we thought it was the part of wisdom to save our pennies for that long rainstorm we were always anticipating.

The result of this frame of mind held so generally by all our people has been to drive prices down and down and down until the profit line has been passed by most manufacturers and by distributors, too. The prominent industrialist who recently remarked that business expansion at the present moment would do nothing more than increase losses was absolutely right. Prices have been driven down by the self-denying attitude of buyers until there is little or no profit in production or sales.

But eventually that same old human nature of which we spoke before comes to the rescue of a situation such as this. Prices eventually are driven down so far that the normal human being with his fundamental desire for things cannot resist any longer. The urge for self-denial can no longer resist the temptation to buy something that the person wants. Henry Ewald, the advertising agency genius of Detroit, recently summed up the situation aptly and briefly when he said: "All God's chillun want things."

There are evidences that the smashing of prices has finally brought costs down to a place where they are doing successful battle with the self-denying attitude that has prevailed for so long. Department stores are reporting an immediate reaction to attractive sales offerings. In New Orleans the D. H. Holmes Department Store has been running a strong advertising campaign built around the idea: "Let's stir things up." The store has been offering bargains, and the ladies, God bless 'em, have flung their self-denial overboard and have been buying. Up in Boston one store staged an annual sale with huge advertising backing and broke all records for numbers of customers and sales.

All business can profitably consider whether the time has not come to break down the self-denial complex of depression by calling attention to the miraculous things that a dollar will do today. And this applies to our own business as well as to others.

A. D. N. Offers Dealers $100 for Letter

This Newspaper Will Pay $100 for Best Letter of Month, $5 for Best Letter Each Day. Read Offer Below

IT has been decided to broaden a little the rules of the prize contest which Automotive Daily News is now running. Instead of offering prizes for letters from dealers who are doing more business than they did last year, we now include all dealers, even though they may not be exceeding the profits they earned in 1931.

Therefore, Automotive Daily News offers a monthly prize of $100 for the best letter from any dealer, telling how he has managed to keep his business out of the red this year, or giving the most constructive idea on how to increase profits, even though his own business may not be exceeding that of 1931. The plan is to pass on to other dealers methods, systems or ideas that will help them get more out of this reluctant market. The editors of Automotive Daily News will be the judges of which letter is best, and prizes will be awarded by them, their judgment being final.

Furthermore, Automotive Daily News will publish every day the best letter received that day and will pay the dealer writing it $5.

Get busy, you dealers, and grab yourselves $100 or a consolation $5, by passing on to your fellows the recipe that is enabling you to make money in a tough year.

In This Corner....

Opinions, suggestions, complaints, criticisms, grievances or what have you. Open to every one to say anything, anyhow, any time. The communications printed in this department represent the ideas and opinions of our readers. They are not necessarily ours. If you have something to say on any phase of automotive activity, wholesale, retail or abusive, let us hear from you and we will tell the world.

Are There Any Nays?

Automotive Daily News: As a steady and early subscriber to A. D. N., permit me to say that I have always reached for it first in the mail. The information and news contained in your paper is always interesting and helpful.

I read with interest the column headed financial news. May I suggest that you make several additions to this column that will be of real assistance to car and accessory manufacturers, car dealers, automotive jobbers; in fact, every one in the automotive field. For one thing, why not list the automotive firms who either go into bankruptcy, liquidate, win or lose judgments, etc.? This information will be of assistance in granting credit, making purchases, etc. At the same time, your paper can either give free listing to liquidation or bankruptcy sales, or else start a classified advertising column devoted to such sales or even the advertising of the sale of surplus stocks by different manufacturers or jobbers, which, of course, can be done without the advertiser using his name where he might consider the notoriety unfavorable.

The writer is positive that many of the jobbers, dealers and manufacturers would appreciate such a column, and the A. D. N. is the only practical medium for it. Of course, a complete classified department might be helpful, too, but I am sure that two columns such as the first, which at present we in this territory can only look for in the New York Times and hunt out the special automotive items, or the second, which is a feature of the New York American exclusively.

Why not try the idea in some form or other? Perhaps a teaser ad in the A. D. N., asking for opinions from the readers might help you decide. However, I would appreciate having your comments.

MATHEW A. SCHWARTZ.
Nucar Equipment Distributor, Inc., Brooklyn, N. Y.

DODGE TRUCK SALES INCREASE STEADILY; LAST WEEK BEST IN YEAR

(Continued from Page 1)

the present week also will be unusually good, and, unless I am mistaken in my forecast, I think the month coming will continue to reflect an improved sales activity.

"Our pick-up has been general throughout the country with the possible exception of certain portions of the South and the Mississippi River states."

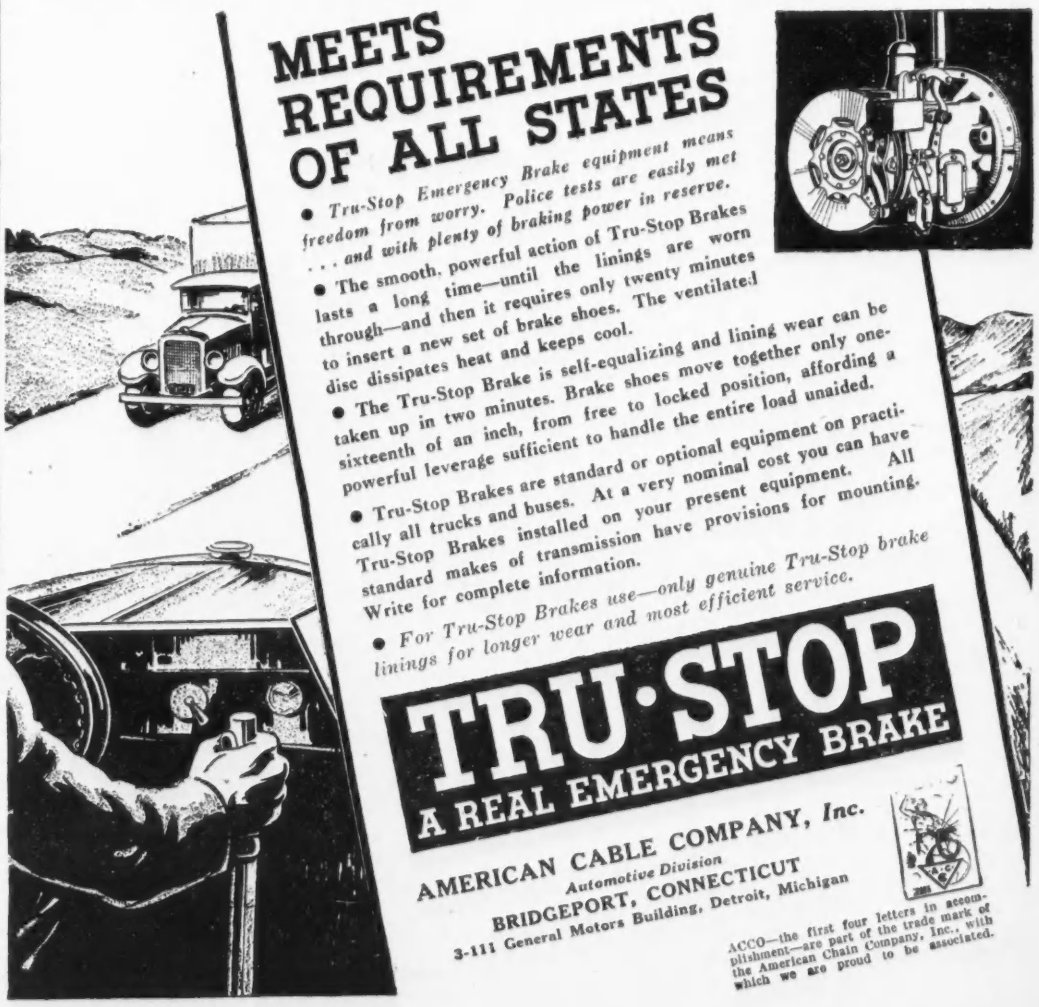
COMING EVENTS

JULY

3—France. Grand Prix Automobile Race.
5- 9—Southampton, England. Commercial Car Show.
9-10—Belgium. Grand Prix Automobile Race.
17—Germany. Grand Prix Automobile Race.
20-22—Llandrindod, Wales. Commercial Car Show.

OCTOBER

3- 7—Buffalo, N. Y. National Metal Congress. Sponsored by American Society for Steel Treating, with cooperation of American Society of Mechanical Engineers, Institute of Metals and Iron and Steel Divisions of American Institute of Mining and Metallurgical Engineers, American Welding Society, Wire Association.
3- 7—Washington, D. C. National Safety Council, meeting.
3- 7—Buffalo, N. Y. National Metal Exposition, 174th Regiment Armory, W. H. Eisenman, 7016 Euclid Ave., Cleveland, director
13-22—London, England. Olympia Show


MEETS
REQUIREMENTS
OF ALL STATES
• Tru-Stop Emergency Brake equipment means freedom from worry. Police tests are easily met . . . and with plenty of braking power in reserve.
• The smooth, powerful action of Tru-Stop Brakes lasts a long time—until the linings are worn through—and then it requires only twenty minutes to insert a new set of brake shoes. The ventilated disc dissipates heat and keeps cool.
• The Tru-Stop Brake is self-equalizing and lining wear can be taken up in two minutes. Brake shoes move together only one-sixteenth of an inch, from free to locked position, affording a powerful leverage sufficient to handle the entire load unaided.
• Tru-Stop Brakes are standard or optional equipment on practically all trucks and buses. At a very nominal cost you can have Tru-Stop Brakes installed on your present equipment. All standard makes of transmission have provisions for mounting. Write for complete information.
• For Tru-Stop Brakes use—only genuine Tru-Stop brake linings for longer wear and most efficient service.
TRU·STOP
A REAL EMERGENCY BRAKE
AMERICAN CABLE COMPANY, Inc.
Automotive Division
BRIDGEPORT, CONNECTICUT
3-111 General Motors Building, Detroit, Michigan
ACCO—the first four letters in accomplishment—are part of the trade mark of the American Chain Company, Inc., with which we are proud to be associated.

Eskimos, Tahitians, Space Buyers

THE ESKIMO is uncomprehending when told of a country without winter. And the Tahitian politely incredulous when apprised of snow. While we strive to brighten the corner where we are, more often the corner shadows us, or at least our point of view. The buyer of advertising may have libraries of data in his office, but his attitude towards the general public is often more determined by the view from his office window.

Detroit very largely lives on and from the automobile. When the rest of the world stops buying automobiles, large portions of Detroit's population stop working, stop earning, stop buying. So the Detroit-depressed space buyer wonders if it is worth while trying to sell the general public; and possibly feels that he must look to the moneyed few for a market—thereby emulating the Eskimo.

In New York, empty windows of vacant shops yawn on Park Avenue, foreign car agents and interior decorators go out of business, and experienced butlers will consider anything reasonable. Shares traded on the Stock and Curb Exchanges are on a par with automobile output. And the New Yorker will tell you that it is hopeless to try to sell to people who have (or had) money just now.

But the major part of the metropolitan population, not employed or unemployed by automobile factories, keep right on with the same old jobs, same old incomes, same old wants and habits. And The News keeps on serving even more of the people here—rich, ex-rich, or ordinary, as always.

If ever there was a time to depend on the mass market for business, this is the time. And it is also the time to depend on The News. It still sells for others; it still reaches a majority of the market; it is still the most efficient medium in the market; and it costs less than ever before.

P. S. The News also shows gains in automobile linage—this year!

THE NEWS, ***New York's Picture Newspaper***

TRIBUNE TOWER, CHICAGO · KOHL BLDG., SAN FRANCISCO · 220 EAST FORTY-SECOND ST., NEW YORK

Production--Engineering--Factory

A Correlation of Some Mechanical and Magnetic Properties of 1.21% Carbon Tool Steel

By J. V. Emmons, Metallurgist, Cleveland Twist Drill Co., Cleveland, O., and R. L. Sanford, Chief Magnetic Section, United States Bureau of Standards, Washington, D. C.

In connection with the work of the society's committee A-8 on magnetic analysis, it has many times been observed that lack of fundamental knowledge of the relationships between the magnetic and mechanical properties of steel constitutes a serious handicap in the development of practical testing methods. In previous experiments with hardened steels, such as the twist drill tests carried out by the committee, the variables have been so numerous and so difficult to control that general conclusions have been difficult to draw. Two factors in particular have contributed to this difficulty, namely, the choice of materials of complex composition, such as high-speed steel, and the difficulty of making satisfactory mechanical tests on hardened steel.

In planning the present investigation, an effort was made to minimize these two difficulties so far as possible, first, by choosing a simple carbon tool steel as a material, and, second, by adopting a method of mechanical test developed by one of the authors which has proved to be especially suited to the testing of hardened material. In this way, it was hoped that some clue might be obtained as to the fundamental relationships between the magnetic and mechanical properties of hardened tool steel.

Mechanical Tests: The mechanical tests were made with the torsion testing apparatus previously used and described by one of the authors. With this apparatus, observations of torque and angular deformations are made from which values of ultimate torque and factors representing plasticity and toughness can be deduced. The form and dimensions of the specimen used for the torsion test are shown in Fig. 1 of the previous paper. Hardness determinations were made by the Rockwell method.

Magnetic Tests: On account of the small size and irregular shape of the specimen it was not feasible to make the magnetic tests with a permeameter of the usual type. A special magnetic comparator similar in principle to the apparatus previously described by Fisher was therefore constructed. In this apparatus, two specimens, one of which has been calibrated in a permeameter, are clamped in parallel across the poles of a suitable electromagnet. By means of test coils surrounding the specimens and a ballistic galvanometer, the inductions in the two specimens resulting from the same value of magnetizing force are compared. By reference to the curve for the known specimen, data can be obtained for the curve of the specimen under test. As this is a somewhat tedious procedure, the test was simplified by omitting the standard specimen and substituting the reading of magnetizing current for the determination of the magnetizing force by the indirect method indicated above. Since only comparative values were required for our purpose, this procedure was justified by the fact that for this type of magnetic circuit the magnetizing force is proportional to the current.

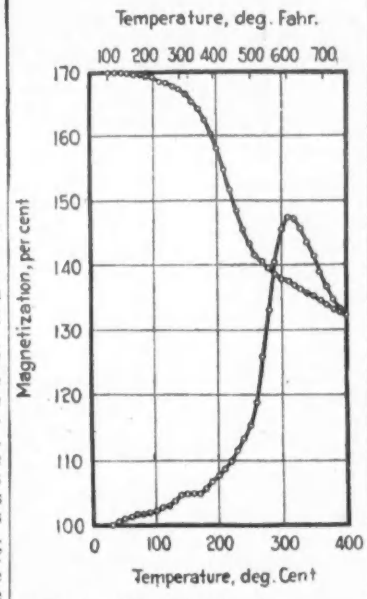


FIG. 1—Magnetization temperature for specimen quenched from 1600° F. (870° C.)

Thermomagnetic Analysis: In addition to the magnetic tests made on the torsion specimens, thermomagnetic tests were run on a supplementary set of specimens made from the same material but cylindrical in form. The apparatus used was similar to that previously described by one of the authors.

(To Be Continued)

For Those in the Commercial Field

Truck Registrations—

Truck News—

Fleet Owner Helps

Whether you are a dealer, a fleet owner, a dealer's salesman, or have any connection with the commercial vehicle industry, a great deal of your success will depend on your knowledge of what is going on in the field. Such knowledge is obtainable through Automotive Daily News.

In this publication you get truck registrations, truck news, fleet owner helps—a great deal of it printed exclusively in this paper.

Important factory executives, big truck dealers, leading passenger car dealers, see and read this paper daily and consider it worth many times the subscription price.

You, too, will get your money's worth from it many times over. Drop us a line or fill in the coupon.

AUTOMOTIVE DAILY NEWS,
1926 Broadway, New York, N. Y.

Send me facts that will prove that your publication will help me in my business.

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Differential Case Flange Truing Lathe

The Eagle Machine Company is bringing out a new differential case flange truing lathe. This machine is designed for use when it becomes necessary to remove the bevel ring gear on account of broken or worn teeth. Before riveting a new gear in place the flange should always be tested and if found to be out of true more than 3,000th of an inch, a truing cut should be taken across the face of the flange to insure a true running, quiet ring gear.

The Eagle differential flange lathe is rigidly constructed, the body being made of 4-inch seamless steel tubing, hardened and ground. The head stock casting is stationary, acting as a motor mounting. The tail stock and cross-feed casting are movable for adjustment to different size jobs. The cones are made of semi-steel and large enough to accommodate any automotive job. An expanding rubber work driver is furnished which is said to be effective and quickly inserted on the center hole of the differential case.

Advantages of this machine are stated as follows:

Truing the gear carrier on its own bearings, true and square with the center axis of the case, without disassembling the inside spider gears. It is not necessary to remove cross pin to insert any work driver bar. It is possible to test the carrier in five minutes with dial indicator, also after gear is assembled, a very necessary feature of a machine of this character.

One-quarter horsepower motor with worm and gear speed reducer giving a speed at the tool of 144 r. p. m.

Standard equipment includes the necessary extra rubber drivers to fit the center hole of cases 1⅛, 1¼, 1⅜ and 1½ in diameter.

One turning tool.

Two extension cones which accommodate the largest Timken or ball bearings.

One-quarter horsepower motor with switch and electric cord to use in any light socket. It is important that full details of electric current be given with order.

Machine weighs, ready for shipment, 222 pounds, 14-inch swing and 12½ inches between cones when fully extended.

BLOCK TYPE BORING BAR

The McCrosky Tool Corporation is putting out boring blocks embodying a new method of locating and locking the cutting block in the bar. In this bar there is a key with a tapered V which locates and locks the block by engaging a V in front of the block. By adjusting the position of this key in the bar, the block may be locked rigidly or made to float by any desired factor.

The design of the key permits the contacting faces on the V to be altered easily to bring the block central in the bar in case the bar is sprung out of line while it is in service. Cutting thrust is not taken by the locating key by a hardened thrust block placed between the cutting block and the rear of the slot in the boring bar.

It is not necessary to remove the locating key from the bar to remove the cutting block. When the key is placed in the same position as is called for in floating the block, the thrust block is easily removed. Then the cutting block may be moved back and away from the locating key and be withdrawn from the bar. The block is reassembled by reversing this process.

Blades are locked in the block by means of an adaptation of the pin and screw lock used in this manufacturer's reamers. The screw has a left-hand thread and the end opposite the thread is piloted in the block. By tightening the screw the pin is forced into a groove in the blade, drawing the blade and block tightly together. Action of the lock is in the same direction as the cutting thrust. This forces the blade against the adjustment screws that enter the block from the rear. These adjusting screws have a relatively large diameter with a fine thread. The contact between the blade and the screw is flat and square, to give accurate adjustment of the blades to micrometer sizes. Cutting blocks are hardened to protect them from damage. Standard blades are made from high speed steel. The company also supplies Stellite blades, and blades tipped with tungsten carbide or tantalum carbide.

Standard blocks are made in five different series, all blocks in each series having the same width and thickness. The total range of bores handled by the blocks in five series is from 1¼ to 12 inches. Each size block may be had in three styles, roughing, finishing and extended. A grinding fixture may also be had for these blocks to permit regrinding, including eccentric relief.

FLORIDA TAG TOLL

Tallahassee, Fla., June 29.—Motor Vehicle Commissioner W. S. McLin reports that the sale of automobile license tags in Florida as of June 15 amounted to $4,698,613.84.

BUFFER SLOT COUPLING

The Brown Engineering Company is placing on the market couplings which have buffer slots cut at regular intervals in the flexible leather disc to give flexibility and make it possible to use the coupling where conditions of angular and parallel misalignment and shock loads exist. The coupling can be run in either direction.

The leather disc between the driving lugs transmits power by compression and not by tension. The buffer slot disc is laminated. Driving lugs extend through the buffer slot disc and it is stated that they will not wear ridges to cause end play when the coupling is operated for a long time in one direction. The leather disc insulates electrically the two connected units from each other. Under any sudden overload all the slots in the disc close automatically, and when the load again becomes normal they reopen. The resiliency of the slots is such, it is claimed, that the coupling acts as a shock absorber.

POWER ADAPTER

The Borden Company is putting out a power adapter or worm driven die stock under interchangeable die heads to thread pipe from half to two inches, known as the Beaver No. 17. This adapter may be run by a three-quarter heavy duty electric drill, or by means of a compressed air drill.

The Beaver No. 17 is for use with hand tools. It is built of aluminum alloy, and weighs seventeen and one-half pounds. A self-centering chuck is placed on the rear to hold it equarely on the pipe. A grip is located on top to make it easy to handle. A double ended drive alows cutting of either right or left handed threads or to back off the adapter by power.

No. 17 unit die heads are used with this adapter. They have four openings between the dies to facilitate oiling, and give plenty of clearance for chips.

LOADMASTER CRANE

The Bucyrus-Erie Company has added to its crane line a new Loadmaster, for use with either Case or McCormick-Deering power. The capacity has been increased to 4,500 pounds.

This Loadmaster may be used as a stationary revolving boom, as a crane traveling with its load or as a tractor. The swing unit, it is pointed out, is useful for loading or unloading trucks and cars, sorting or piling stored material, serving machine tools or in overhauling and repair work. It may be had with either wheel or crawler equipment.

Truck Rating Committee Suggests Tentative Formula

New York, June 29.—Official reports on the meeting of the motor truck and motor coach ratings committee of the Society of Automotive Engineers, held at White Sulphur Springs during the summer meeting, has just been made public. The report shows that the committee voted that the action taken at this time is purely tentative and subject to approval by members of the committee who were not present. Further consideration of the subject will be given at the transportation meeting, which will be held in Toronto in October.

The result of the committee meeting at White Sulphur Springs may be summed up as follows: A number of suggestions have been submitted by members of the committee since the last meeting in Detroit last January, when there was discussed a tentative method of expressing ratings by a three-term expression including: First, gross vehicle or train weight; second, grade ability factor, and third, maximum top or governed speed.

These factors were given earnest consideration by the committee and it was decided that the method offering the greatest possibilities was that suggested by T. C. Smith, expressing the ratio between the chassis, without power plant equipment, and gross weight.

The point was then made that a definite ratio would be undesirable because it would be too restrictive if enacted into a law, since it would keep out of the rating improvement in design and the use of new and better materials.

After exhaustive discussion, the committee decided for the following three-term expression as the method of rating:

1. Gross chassis capacity, to nearest 100 pounds.
2. Gross vehicle weight, to nearest 100 pounds.
3. Chassis weight, less power plant, to nearest 100 pounds.

It was also agreed that these terms should be defined in the recommendation as to their interpretation and use in rating trucks, and the following supplementary information was approved:

4. The first term of the rating is for the purpose of classification.
5. The second term is the vehicle manufacturer's gross - vehicle-weight rating.
6. The third term is pertinent information.

To avoid confusion as to just what part of the vehicle the first and second terms of the rating include, the following definitions also were approved:

7. Gross chassis capacity includes the pay load, body, cab and body equipment weights.
8. The power plant includes the engine, clutch, transmission and engine accessories.

Discussion then turned to the grade ability formula for expressing performance ability, approved at the meeting last January, and alternate methods suggested since then by members of the committee. This formula is:

Per cent grade =

$$100 \left(\frac{T \times 12 \times e \times R}{r \times GVW} \right) = RF$$

In this formula the factors are defined as follows:

- e = efficiency from engine to tires = 0.90
- GVW = gross vehicle weight in pounds
- R = gear reduction (axle ratio when used for rating calculation, but can be axle ratio times transmission ratio when figuring ability in other than direct gear)
- r = rolling radius in inches of driving tires at rated capacity
- RF = road rolling-resistance factor per pound of GVW = 1.5 lb. per 100 lb. for good road conditions
- T = engine torque in pound-feet = cubic inches of displacement × 0.625.

The opinion of those present was that the ability formula should be regarded as supplementary to the proposed standard method of rating, so that the performance of trucks could be indicated on a uniform basis. It was agreed, however, that the exact formula to be used is not so important as is the use of the same constants in whatever formula is applied. Accordingly, this phase of the subject was left for further study and agreement at the next meeting of the committee, to be held at the transportation meeting in Toronto next October. However, the committee plans to include formulas suggested by M. C. Horine, L. P. Kalb and other members in its recommendation as alternate methods of calculating truck ability.

Members in attendance were Chairman L. R. Buckendale, B. B. Bachman, J. W. Cottrell, F. K. Glynn, M. C. Horine, President A. J. Scaife, Pierre Schon, T. C. Smith, J. W. Shields, John Walker, J. F. Winchester, A. M. Wolf and B. F. Wright.

NEW STEEL OFFICIAL

New York, June 29.—Edwin L. Ellis, who succeeds David G. Kerr as vice-president of the United States Steel Corporation, is president of Universal Exploration Company, a subsidiary of the United States Steel Corporation, through which research work is conducted

MERGED TRANSPORTATION LINES UNIFY CONTROL

Oklahoma City, June 29 (UTPS).—Operating details have been worked out and are now being put into effect to provide for unified management of the Southwest's newest automotive transportation giant, resulting from the merger of the Southern Kansas Stage Lines, with headquarters in Wichita, Kan., with the Ward-Way system, owned formerly by the Cannonball Bus Lines.

The merger makes the Southern Kansas the largest bus and truck operator in Oklahoma and probably in the entire Southwest. The new and larger company still is headed by D. E. Sauders of Wichita. Under the set-up of the new system the Southern Kansas has a personnel roster of 400 persons, operates 2,000 miles of motor freight lines and 3,500 miles of motor passenger lines, with a fleet of 70 trucks and trailers and 100 buses.

With the merger went an extension of the freight line service from Wichita to Omaha. The enlarged network will have, as its most important central and terminal points, Wichita, Kansas City, Omaha, Tulsa and Oklahoma City. With addition of new trucks and other equipment the Southern Kansas Stage Lines has revised its schedules to include overnight freight service from Kansas City to Tulsa and Oklahoma City. It serves as distributor from Kansas City of less-than-carload merchandise for the National Carloading Company.

Trade Association News

Miami Dealer Body Elects New Officers

Miami, Fla., June 29.—At the annual meeting of the Miami Automobile Dealers' Association, held recently for the election of officers for the coming year, W. R. Becker of Packard Miami Motors, Inc., was elected president; Stanley Peeler of Nolan-Peeler Motors, vice-president, and R. D. Freeman of Freeman & Sons, Inc., secretary-treasurer.

The following members were elected to the board of governors: S. J. Thorpe, Biscayne Chevrolet Company; M. S. Altmayer, Ungar Buick Company, and S. C. Murray, Barker-Murray Motor Company.

In accepting the presidency Mr. Becker said: "The automobile dealers of Miami occupy a most important position in the business life of our city. Their investments, pay rolls, taxes and the actual conduct of their businesses contribute substantially toward both the business life of our community and the operating costs of our state, county and municipal governments. Such a position entails a responsibility, of which I believe the automobile dealers of Miami have a full appreciation. Our forward movement, under existing conditions, can do much to minimize and alleviate the acuteness of the present business situation."

103 separate inspections and tests predetermine the quality of Defiance Spark Plugs...This quality is further protected by the Defiance method of cartoning, with individual cartons wrapped in Cellophane.

Are you acquainted with the *Defiance* Merchandising Plan?

There are 7 Points in this Plan which is so fundamentally sound that it has received the active merchandising and selling cooperation of more than 67,000 dealers from coast to coast . . . Behind this Plan is a substantial national advertising program, now in its fourth year, with a very considerable increase this year in the advertising expenditure. This fact makes the Defiance Dealer Franchise increasingly desirable at this time. Advertising and dealer helps are a considerable part of the merchandising assistance afforded to Defiance dealers.

Regardless of your particular field of automotive repair or maintenance, it will be to your distinct advantage to learn about a personalized spark plug service such as is offered by no other large spark plug manufacturer . . . Defiance is a national organization, with district offices in all principal cities.

Defiance Spark Plugs, Inc.

TOLEDO · OHIO

Makers of Defiance Spark Plugs of Predetermined Quality

REPAIR ACCOUNTING SYSTEM ENABLES THIS FLEET OWNER TO CHECK UP ON EACH TRUCK

A repair accounting system which enables the expense record of each vehicle to be kept up to date at all times, and obviates the necessity of a rush at the end of the month, has been worked out by the United Parcel Service for use in its repair shops throughout the nation.

For each vehicle there is a long ledger card. And each day that the vehicle is responsible for the expenditure of any mechanic's time, or for expenditures for parts, the cost of the labor or materials involved is entered on this card.

Entries are made from mechanic's job time tickets, filled out by the mechanics themselves, and from stock orders.

This system differs from others in that the entries are transferred to the card of each vehicle, immediately on the same day, instead of at haphazard times or at the end of the month.

Thus, if any one desires to know at any time expenditures up to date on a given vehicle, the figures are immediately available instead of buried in a pile of slips.

On one side of the vehicle card are listed "labor" charges. At the left, there is a column of lines for the dates of work. To the right of the date the accountant has space to write in separate columns the cost of mechanical repairs, body repairs, blacksmith work, trimmer and painting.

Another blank of importance in the United Parcel Service's accounting system is the repair order. This is a cardboard blank about eight by ten inches, with fifty-four lines on the front and back sides, for listing every detail of repairs required in a given vehicle. There is space at the top of the repair order for listing the date and time the car is received in the shop, date and time the work is promised for completion, date and time the work is actually finished, division and car number and speedometer reading.

Items of repair work to be performed are listed on numbered lines at the left of the blank. To the right of each numbered item there is space for the "estimated or standard time" for the item.

The actual time spent on each repair item is computed by adding time spent by different mechanics on the item. At the right of the blank the names of all mechanics working on the job are listed. Beside each mechanic's name appears the number of the repair item he works on and the time he spends on it. If a perusal of this right side of the blank shows Kelly spent fifty minutes on item or "line" 1, Jones two hours and Smith three hours and a half on the same item, the total of the work these three put on item 1 is added to arrive at the figure for the "actual time" column for line 1.

After the repair job on the given vehicle is finished, the total time spent on it can be readily calculated. At the bottom of the blank there is space for "remarks," the name of the person writing up the job and the name of the person handling the inspection and road test.

Information for inclusion in the repair order is obtained from the mechanics' job time tickets. These are filled out by the mechanics themselves. They contain space for the mechanic's name, the date and the number of the car, the time of starting and stopping and the total time spent by the mechanic on the given item, whose line number he lists.

All the above records are kept up

(Continued on Page 10)

FLEET OWNER LISTS

OPERATORS HAVING	Number of Companies	No. of Listings	No. of men to see (Mailing pieces required)	No. of Automotive Vehicles	No. of Vehicles Per Contract
10 or more	16,000	18,000	25,000	1,500,000	60
100 or more	1,150	2,100	3,400	700,000	210
1,000 or more	75	600	1,000	300,000	300

LISTS THAT ARE KEPT UP TO DATE

Lists that show the Name of the Man to See and the total Number of Vehicles

Each Local list is zoned, routed, alphabetically indexed, and vocationally keyed

We can supply a local list for any Territory or a national list

FLEET OWNER LIST CO. **1817 B'WAY, N. Y. C.**

Cumulative New Commercial Car Registration Statistics, May, 1932

Returns for today: Alabama, Arizona, Kentucky, New York, Tennessee, Texas.

Figures in this table are from R. L. Polk & Co. of Detroit, with the exception of Illinois, which are supplied by the Robinson Advertising Service, Springfield, Ill., and New Jersey, which are furnished by the New Jersey Motor List Co., New Car Division, Trenton, N. J. Metropolitan district figures compiled by Sherlock & Arnold are included in New York state total. Readers desiring county, city or town lists, or lists of owners in any given section, may obtain these by addressing any of these three companies. Some of this data has been published previously, but it is given here complete for the convenience of our subscribers. Commercial car figures do not include busses.

In this table, 39 states and the District of Columbia. **Comparative figures for May, 1931, will be found on Page 10.**

States	Autocar	Brockway	Chevrolet	Diamond-T	Dodge	Federal	Ford	G. M. C.	Indiana	International	La France Republic	Mack	Pierce-Arrow	Reo	Sterling	Stewart	Studebaker	White	Willys-Overland	Miscellaneous	Totals	States
Alabama			76		8	2	44	7		11		1		3			2	1			155	Alabama
Arizona			33		2		21	1		3							1				61	Arizona
Arkansas			41		4		38	2		8							2	1			96	Arkansas
Connecticut	3		135		29	4	143	12	2	30	2	10	2	18		1	3	4	2	13	413	Conn.
Delaware	2		24		1		31	5	1	10		1		2		2	3		2		84	Delaware
Florida			61		2	1	88	3		14		1						1	1	19	191	Florida
Idaho			32		2		39	2		7									1	2	85	Idaho
Illinois			243	46	46	7	244	25	2	107		1	1	10			17		6	23	778	Illinois
Indiana			133	5	18	1	116	15	8	67				6			10		1	7	387	Indiana
Kansas			120	3	10	1	87	8	1	25	1			2			5		1	5	269	Kansas
Kentucky			72	3	8	9	42	5	1	11				3			2		5	1	162	Kentucky
Louisiana			61	1	5		58	7		26				1						1	160	Louisiana
Maryland	9	6	115	1	12	2	105	21	3	49		8		5			8	13	1		358	Maryland
Michigan	1		207	2	45	9	382	22		56	1	2		9			17	2	2	6	763	Michigan
Minnesota			250	14	47	10	232	16		68		3		12		1	11	3	4	4	675	Minnesota
Missouri			245	17	25	4	233	19	2	57	2	2	1	10			6			18	641	Missouri
Montana			32		5	1	37	4		17		1					2		2		101	Montana
Nebraska			66	2	9	1	73	7		32		1		5			5	2	2		205	Nebraska
New Hamp.		2	55	6	9		100	9		10	1			1		1	1		2	1	198	New Hamp.
New Jersey	5	11	305	22	38	10	286	37	6	60		7	2	24	1	6	4	8	4	27	863	New Jersey
New Mexico			15		1	1	26	1		10							1				55	N. Mexico
New York	15	41	617	50	141	13	906	81	8	236		79	7	57	5	56	20	34	17	63	2446	New York
North Car.			120	1	11		120	9		14		2		1			2	4		7	291	North Car.
North Dakota			27		5		32			25	1						2		2	2	96	North Dak.
Ohio	5		203	4	63	7	312	23	9	110		1		22	1	6	18	10	8	57	859	Ohio
Oklahoma			80		9	5	97	8	3	16		1					3			2	224	Oklahoma
Oregon			38		5		62	6	2	10		1		3			5	1	1	3	137	Oregon
Pennsylvania	12	6	501	14	127	17	506	41	3	132		17	3	34	4	35	37	21	21	20	1551	Penna.
Rhode Island			30	3	7	7	69	7		7				8				1		1	140	Rho. Island
S. Carolina			41		7		27	1		3								1		2	82	S. Carolina
S. Dakota			30	2	8		18	1		10				1			2	1			73	S. Dakota
Tennessee			65	2	11	3	60	3		18		3		2			2	1	1	5	176	Tennessee
Texas			329	1	25	2	287	14	2	79		10		6			4	5		18	782	Texas
Utah			31		3		34	3		8				1				1		1	82	Utah
Vermont			49	1	13	2	82		1	23				3		4			7		185	Vermont
Virginia			180	1	21	3	132	11	5	24	3	3		7				4	1	3	398	Virginia
Washington			60	8	8	1	95	7	1	40		2		4			5	2		12	245	Wash'ton
West Virginia			47	1	12	1	63	4	2	16		2		5			3	1	5	1	163	West Va.
Wisconsin			116	13	22	2	108	11	3	27				5	1		8		3	14	333	Wisconsin
Dist. of Col.			46	3	5	4	35	14		3								3		1	114	Dist. of Col.
Totals	52	66	4931	226	829	130	5470	472	65	1479	11	159	36	270	12	112	211	125	102	339	15077	Totals

GENERAL MOTORS SETS FORTH PROCEDURE IN PRESENTING NEW DEVICE

(Continued from Page 1)

from all divisions and from other corporation activities.

WHAT ARE NEW DEVICES?

The section does not consider articles which are already being manufactured and sold on the open market. Such articles should come to the attention of the manufacturing divisions of General Motors. Each division is responsible for the design of its products and purchases whatever equipment and materials are needed in their manufacture.

The activities of the New Devices Section are limited to things for which patent protection is, or would be, offered for sale.

HOW TO SUBMIT A DEVICE

The offices of the Section are located in the General Motors Building, Detroit, Mich. The Section does not have representatives in any other city.

Submission of patentable by letter has proved satisfactory to all concerned. In fact, the procedure of the committee has been arranged so that sending ideas by mail often saves the time and expense of a trip to Detroit; and the same thorough study is given all devices whether they are submitted by mail or through a personal interview. However, should it be impossible to present an idea by mail a representative of the committee is available in Detroit, and it is suggested that a definite appointment be made by letter in order that the business of the inventor may be expedited.

INFORMATION REUIRED

Descriptive material including sketches or drawings sufficient for a complete understanding of the patentable device must be provided. Models are not usually necessary but may be presented if desired. Without adequate information a fair and proper decision cannot be made.

The inventor should say what he believes to be his invention and specifically indicate the particular new feature he wishes to sell. Patents or patent applications give the best possible evidence of this. He should also state the basis on which he would propose tod eal with General Motors.

Changed conditions may cause interest to develop in devices previously submitted and rejected. To enable General Motors to deal fairly with inventors in such cases it is necessary for the Corporation to keep sufficiently clear records to permit a reconsideration of the device at any time. The descriptive material will not be returned unless the subhitter so requests. When the material is returned, the Corporation will make such copies as seen necessary.

General Motors will not make any agreements or contracts unless sufficient information is in the possession of the committee upon which to base an intelligent and sound judgment of the device in question. Oral conversations and letters exchanged concerning ideas submitted shall not be deemed an acceptance of any proposal unless and until all details of any agreement which we may negotiate shall be formally reduced to writing and a formal document executed under seal of the corporation.

PATENTABILITY IS NECESSARY

The inventor has nothing to sell unless his device is patentable. Patentability can only be determined by prosecuting an application in the United States Patent Office. To insist upon the completion of this work before consideration by the corporation would often cause unnecessary expense and delay. General Motors will consider devices and ideas for which patents or patent applications are not yet available, provided that the submitted sketches and descriptions be dated and witnessed, preferably before a notary. The inventor must be responsible for deciding when it will be advisable for him to apply for a patent, and should remember that he has no protection under United States patent law unless he finally obtains a patent.

The New Device Section and the manufacturing divisions and subsidiaries of General Motors will make every effort to prevent information regarding the subject matter of any unpatented new device from reaching unauthorized persons. General Motors will not enter into any confidential relation with the inventor such as to impose any liability upon itself other than those imposed by the patent laws of the United States. General Motors must always remain as free to use any unpatentable idea or device as if such had never been submitted.

General Motors reserves the right to decline to enter into any discussion with persons other than the inventor regarding the corporation's possible interest in any device. Whenever misleading publicity appears regarding General Motors' alleged interest in a new device such steps as seem desirable will be taken.

REASONS FOR REJECTION

A device presented to the committee is considered only from the standpoint of possible interest to General Motors. General Motors' products must be built to give satisfactory operation under world-wide conditions. Many factors are involved and the decision is not by any means based entirely upon mechanical merit. We must consider devices from the standpoint of mechanical utility, commercial advantage and patentability. The facts and reasons behind a decision of the committee are not made public.

Single Line Multi-Feed Lubrication System

The Hills-McCanna Company is putting out a new single line multi-feed lubrication system, designed for the mechanical application of light greases and heavy oils to places needing continuous lubrication.

The main unit of this system is placed at a strategic location and a single feed line is run to the farthest point needed lubrication. Branch lines are dropped off from this main feed to each bearing. No return line is needed. A mechanical measuring unit is placed on each bearing.

The measuring valve is set for the amount of lubricant that must be fed to the bearing, and this also acts as a shut-off valve to keep excess lubricant from going to waste. Pressure is applied to the line only at the time that the various points are being lubricated. The system may be motor-driven, mechanically operated, and it may be operated manually by means of a crank, depending on the service. Hoppers, valves and motors are made in different sizes to meet varying services.

DALLAS TAX DODGERS AID CAR DEALERS

Dallas, Tex., June 29.—J. H. Connell, executive secretary of the Dallas Automotive Trades Association, says that a decided spurt in automobile sales in Dallas county is revealed by resistrations, attributed largely to the imposition of the 3 per cent. tax on automobiles, bodies and chassis.

Tabulation of registration figures made in Secretary Connell's office showed that the new car registrations the first eighteen days of April totaled 303, the corresponding time in May, 340, and June, 473. Used cars registered these eighteen-day periods were: April, 804; May, 787; June, 791. Percentage increases in new car sales were: May, 12 per cent. over April, and June, 39 per cent. over May.

"Proving again that it is an ill wind that blows nobody good," Dr. Connell declared. "Dealers are finding out that the bulge in sales stimulated by buyers getting under the wire to escape the tax is stimulating friends of buyers to make the long deferred purchase of a new car."

Automatic Self-Opening Die Head

The American Die and Tool Company is placing on the market a new automatic self-opening and quick-setting die head, needing only two sets of dies to thread all sizes of pipe from one-half to two inches, inclusive, one for the half and three-quarters, and the other for one and two inch sizes. The device is marketed under the name Red-E-Quick.

In this tool the die controlling cam ring has a notched segment, each notch corresponding with and being marked for a given setting of the dies. The notched segment is engaged by a pawl, and this, as the cam ring rotates, engages first one notch and then the next, until the proper one is reached, where the pawl locks the dies in the positions required. Adjustment means are provided.

When a standard length thread is to be cut, a spring plunger is depressed begore the dies are set. When the full length thread has been cut the plunger trips the pawl, the dies open and the pipe is free to be removed.

HERE'S TRUCK NEWS!

2-TON DODGE SIX CYLINDER CHASSIS

$795

580

CHASSIS WITH 136″ WHEELBASE AT $795
CHASSIS WITH 165″ WHEELBASE AT $825

HERE'S news for any one who moves goods. A standard 2-ton Dodge Truck chassis with 136-inch wheelbase at $795 . . . 165-inch wheelbase at $825, f.o.b. factory, Detroit.

73 Horsepower, five-speed transmission, hydraulic brakes, 700x20 duals, helper springs . . . and many other value features.

Now you can stop overloading your ton-and-a-half truck.

Here's a fast, flexible, easy-riding 2-ton—and the price is right at bottom. Compare it with any other 2-ton chassis built.

The Dodge Truck line is a complete line. The ½-ton chassis at $375 and the 1½-ton chassis at $525, f.o.b. factory, Detroit, are right down in the lowest-price field. Dodge Heavy-Duty Trucks are built for gross capacities up to 7½ tons.

DEALERS—*Write Jos. D. Burke, Director of Truck Sales, Dodge Brothers Corporation, Detroit, for information about the Dodge franchise.*

REPAIR ACCOUNTING

(Continued from Page 8)

from day to day, so that the mechanics' tickets need not be referred to to secure information.

United Parcel Service operates in New York, Brooklyn, Los Angeles, San Francisco, Newark, Seattle, Portland, Oakland, San Diego, Long Beach, Pasadena and in Paterson N. J.

Willard D. Bixby, who is located in the New York office, at 331 East 38th St., is manager of motor equipment for all the company's operations in these cities.

Mr. Bixby has developed an effective system for preventing the discarding of a part or unit when it would still be good practice to recondition it for further use. Instead of leaving the matter of whether to discard, say, a magneto, to the judgment of a mechanic at a suburban point, he has issued orders that the magneto be sent back to the main shop on 38th Street. There it must be inspected by the superintendent or foreman before it can be discarded.

In the New York area the magneto or other unit needing repairs is brought into the main shops on 38th Street by one of the dozen heavy transfer trucks used for carrying packages to the various suburban centers of distribution.

An effective system of tire maintenance has been worked out by putting all tires under the care of a man who is paid a salary plus a bonus for economies. Puncture-proof tubes are used on half the fleet, and Mr. Bixby states there has never been a flat on a car equipped with them.

On the Atlantic, 350 out of 511 cars are Whites, while on the Pacific 85 per cent. of the fleet are Fords. In addition to the Whites, the New York and vicinity fleet includes twenty-six twin coaches, 100 electrics, eighteen Fords and a few others. Some of the odd cars are the result of taking over fleets of various department stores.

The company does all repairing itself, except magneto and radiator work. Besides the central shop on 38th Street, where all major units are overhauled, the company keeps two outlying shops in Brooklyn and one each in Jamaica, Hempstead, Mount Vernon, Paterson and Newark. There is one mechanic to about fifteen cars at these points.

There is no periodic overhaul either by time or mileage, the matter of when a unit or the entire vehicle needs attention at the central repair shop, which is devoted to major repairs, being left to individual judgment.

Because of the extremely seasonal nature of store delivery, which makes up the greater part of the United's business, the company has a large section of its fleet idle during dull seasons. It has been found more advantageous to adopt this procedure than to hire extra cars during the Christmas rush.

Inflation of tires is left up to the driver, who suffers a bonus deduction if he fails to keep it right. The bonus system is developed in great detail, and has been found well worth the expense involved.

WISCONSIN AXLES

Heavy loads, high speeds, rough roads—these arduous operating conditions determine the exacting specifications to which Wisconsin Axles must conform.

WISCONSIN AXLE CO.
OSHKOSH WISCONSIN

CRUDE OIL PRODUCTION OFF FOR WEEK ENDED JUNE 25 BY 40,000 BBLS.

New York, June 29.—The American Petroleum Institute estimates that the daily average gross crude oil production for the week ended June 25, 1932, was 2,156,100 barrels, compared with 2,197,550 the previous week. Daily production for the four weeks ended June 25 averaged 2,179,600 barrels.

Reports received from refining companies controlling 95.1 per cent. of the 3,852,000-barrel estimated daily potential refining capacity of the United States indicate that 2,312,000 barrels of crude oil daily were run to the stills operated by those companies and that they had in storage at refineries at the end of the week, 38,913,000 barrels of gasoline and 129,864,000 barrels of gas and fuel oil. Gasoline at bulk terminals amounted to 14,743,000 barrels an1 2,367,000 barrels were in water borne transit in or between districts.

Cracked gasoline production by companies owning 95.6 per cent. of the potential charging capacity of all cracking units averaged 460,700 barrels daily during the week.

BRAKE TESTS MADE BY NEW YORK POLICE

(Continued from Page 1)

whether the owner of the vehicle in question has his brakes in proper condition for safety.

It is the experience of the Police Department that the majority of service brakes are found in fair or good condition, but the majority of hand or emergency brakes are not prepared to stop the car in the required distance. They have also discovered that the manufacturer of motor brakes has got into the habit of building the emergency brakes connecting linkage so light that the brake when applied suddenly, fails. The brakes are designed so poorly that on the occasion of a sudden stop they break the axle, transmission housing or snap the brake rod so that the operator of brakes today is in a situation where if he keeps his emergency brakes up to the standard required by the Police Department, he will be in the situation where he will be constantly damaging his vehicle.

In other cases the brakes are so poorly designed that when occasion for a sudden stop comes, they break the axle, the transmission housing or snap the brake rod. This places the operator today in a position where, even if he keeps his emergency brakes up to the standard required by the Police Department, he is likely to be placed in situations where his vehicle will be subject to constant damage.

The following is a list of the stop distances required by the New York Police Department:

Two-Wheel Brakes

	Feet
10 miles per hour	9 3-10
15 miles per hour	20 8-10
20 miles per hour	37
25 miles per hour	59
30 miles per hour	83.3
40 miles per hour	148
50 miles per hour	232
60 miles per hour	333

Four-Wheel Brakes

	Feet
10 miles per hour	5 6-10
15 miles per hour	12 5-10
20 miles per hour	22 2-10
25 miles per hour	34 7-10
30 miles per hour	50
40 miles per hour	89
50 miles per hour	139
60 miles per hour	200

OKLAHOMA TRUCK OPERATORS ORGANIZE

(Continued from Page 1)

Wewoka, Okla., Chamber of Commerce.

Plans were made to open the central office in Oklahoma City about June 20, after which a campaign will be pushed to build the membership of the association and strengthen it for the larger program of building up good will and the industry in Oklahoma.

The new association will include among its members Class A truck and bus operators, Class B truck and bus operators, Class C operators, and representatives of lines of business allied to the motor truck and bus industry.

Brockway Trucks

Meet all time Quality demands and Economy requirements—For twenty-three years BROCKWAY has stood for the principle of building motor trucks on special standards to meet the specific demands of the various truck using industries.

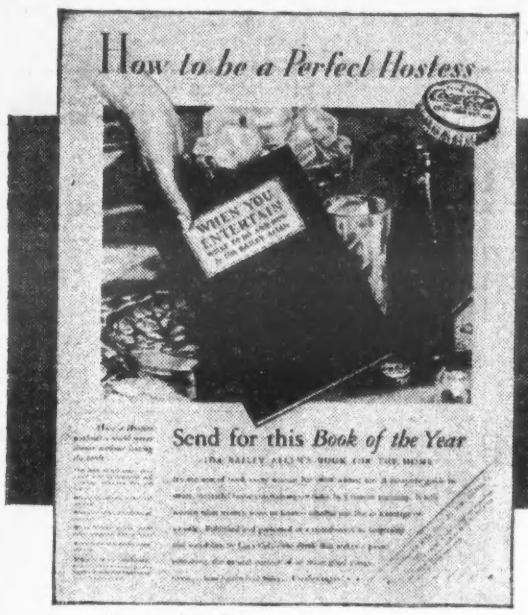
BROCKWAY MOTOR TRUCK CORPORATION
Main Office and Factory
CORTLAND NEW YORK

Cumulative New Commercial Car Registration Statistics, May, 1931

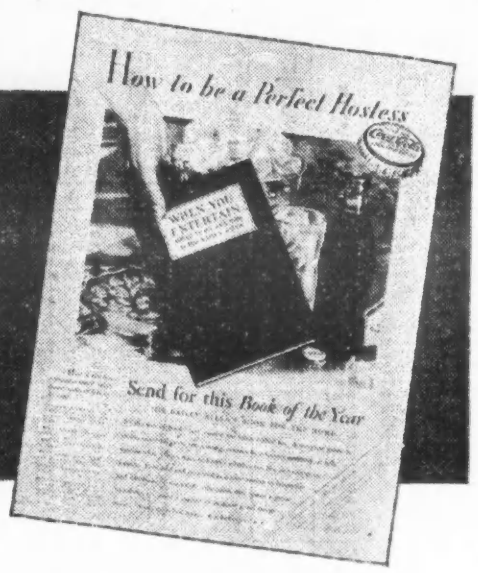
This table is repeated for comparative purposes only. Figures for May, 1932, will be found on Page 8.

States	Autocar	Brockway	Chevrolet	Diamond-T	Dodge	Federal	Ford	G. M. C.	Indiana	International	La France-Republic	Mack	Pierce-Arrow	Reo	Sterling	Stewart	Studebaker	White	Willys-Overland	Miscellaneous	Totals	States
Alabama, 1931			143		2		163	2		8		1	1				1	3		5	329	Alabama, '31
Arizona, 1931		1	48		6		91	3		8				2			2		2		163	Arizona, 1931
Arkansas, '31			63		2		100	2		13				1				5	1	3	190	Ark., 1931
Conn., 1931		2	158	4	40	10	281	9		30	2	18		3	4	8	17	8	6	15	615	Conn., 1931
Delaware, 1931	4		41		2	1	41	1		12									1	4	107	Del., 1931
Florida, 1931			122		7	4	188	2		27				6				2	3	3	364	Florida, '31
Idaho, 1931			55		16		89	3		9							4		3		179	Idaho, 1931
Illinois, 1931	3	5	429	36	71	3	641	18		137		13		6	5	1	26		15	43	1452	Illinois, 1931
Indiana, 1931	1	13	330	8	57		382	26		94		2	1	6		4	31		21	4	980	Indiana, '31
Kansas, 1931		4	196	2	19		166	9		55				2		4	9	1	10	3	480	Kansas, '31
Kentucky, 1931		3	113	3	14	1	147	5		43		3		6		1	7	2	9	2	559	Kentucky, '31
Louisiana, '31			158	2	14		230	1		45							1	2	3	2	458	La., 1931
Maryland, '31	9	5	144	6	18	2	224	24		46		14		6	1	3	7	3	4	2	518	Md., 1931
Michigan, '31	3		330	5	49	19	765	23		61	6	6		17		2	8	1	12	17	1324	Mich., 1931
Minnesota, '31			328	15	30	7	413	10		128	1	4	1	14			20	6	25	11	1013	Minn., 1931
Missouri, 1931		7	329	10	25	9	366	10		42	1			2	1		9	5	17	14	847	Missouri, '31
Montana, '31			32		3		76	6		30		1		5	1		1		2	2	159	Montana, '31
Nebraska, '31			148	3	12		228	4		54		2					7	1	9	10	478	Nebraska, '31
N. Hamp., '31	1	1	72	1	11		161	7		10		1		5		1	6	2	8		287	N. Hamp., '31
N. Jersey, '31	14	6	470	16	108	13	675	40		74	2	31		6	9	3	19	27	15	53	1581	N. J., 1931
N. Mex., 1931			48	1	4		91	1		10				1				3	1	2	162	N. M., 1931
New York, '31	36	75	870	54	179	16	1824	80		261	3	117	2	59	12	90	29	51	54	94	3906	N. York, '31
N. Car., 1931	1		245		24		267	5		36		2		4			1		2	11	598	N. Car., '31
Nor. Dak., '31		1	73		16		82	5		76				1			5	1	3		263	Nor. Dak., '31
Ohio, 1931	4	7	424	6	90	7	707	29		106	1	10		14	2	13	31	18	35	71	1575	Ohio, 1931
Okla., 1931		1	164	1	19		155	5		9	1	1		1				1	2	3	364	Okla., 1931
Oregon, 1931			110		9	4	210	11		24		2		3	6		6	2		12	399	Oregon, '31
Penna., 1931	24	22	610	15	159	13	1043	35		132	9	29		15	14	35	34	21	44	64	2317	Penna., 1931
Rho. Isl., '31	2		46	6	26	3	119	4		10		7		4	2	1			1	3	234	R. I., 1931
S. Car., 1931			125		3		151	1		9	1	1		1			3			2	297	S. Car., 1931
S. Dakota, '31			64	7	11		81			46				2			6			2	219	S. Dak., 1931
Tenn., 1931			109		19	9	116	2		20	1	4			2		2	7	2	3	296	Tenn., 1931
Texas, 1931	1	10	649	10	22	3	705	9		154		4		11			7	5	9	12	1611	Texas, 1931
Utah, 1931			55		4		74	4		9				4			1		1	2	154	Utah, 1931
Vermont, 1931		1	47		10		99			18		2		5			3		8		193	Vt., 1931
Virginia, 1931	5	3	325	2	27	6	338	14		44	2	4		3		1	3	6	5	7	795	Va., 1931
Wash., 1931			96		12	1	209	7		22		1		2	1		12	7	3	26	399	Wash., 1931
West Va., 1931	1	3	150	1	25		155	3		25		2		5		1	5	5	8	2	391	West Va., '31
Wisconsin, '31			319	17	19	2	402	17		59		1		4	3	1	18	2	19	17	900	Wis., 1931
D. of C., 1931	3		46	6	3	1	124	6		9		7		1				2		7	215	D. of C., 1931
Total	112	170	8284	237	1187	134	12379	443	*	2005	30	296	5	227	63	169	341	199	363	533	27171	Totals

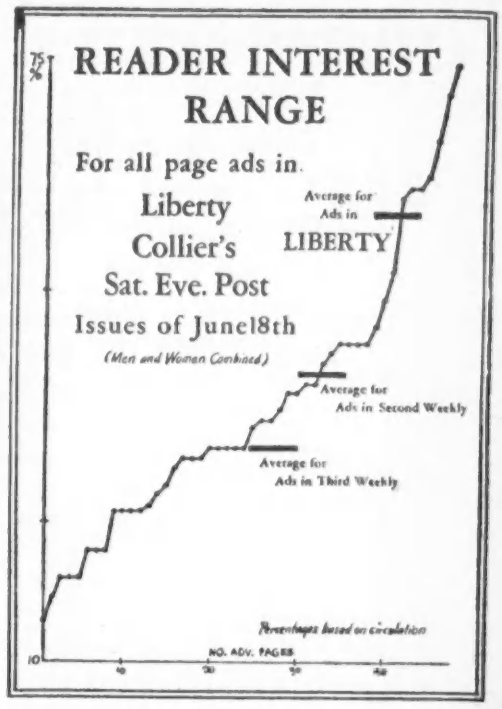
*Combined with Brockway.



Advertiser: Coca-Cola
Agency: D'Arcy Advertising Company
Space: Four Color Back Cover
Reader Interest: 92% Above Average Page



Advertiser: Coca-Cola
Agency: D'Arcy Advertising Company
Space: Two Color Third Cover
Reader Interest: 78% Above Average Page



What's the difference between these *two* of *America's Best Read Advertisements*

for the week of June 18?

Answer:

One ran in Liberty, "America's Best Read Weekly"... the other in another big weekly.

The one in Liberty won 57% more readers per dollar expended than its twin in the other weekly.

HERE are "the best read ads" of the week of June 18, 1932, as rated by Percival White, Incorporated, in the current phase of their every week count of what people read in every issue of Liberty, Collier's and Saturday Evening Post.

But, you say, two of these ads are the same!

Not quite, we assure you. One ran in Liberty (two colors, third cover) ... the other in another weekly (four colors, back cover).

And that difference made a difference of 57% more readers per dollar expended.

Every week, we are told, thousands of admen study these bulletins, muse over the value of color, position, layout and headline appeal in getting ads better read.

Yet, *mere choice of the magazine to carry the ad* seems the most CONSISTENT factor affecting attention value. Below are tabulated figures showing the increased attention value (which means increased *real* circulation) enjoyed by the average page ad in Liberty for each of the six Gallup-study weeks and the seven White-study weeks to date:

Average page ad in Liberty had extra attention value (*real* circulation) as follows:

	Over Second Weekly	Over Third Weekly
1	14%	20%
2	35%	65%
3	26%	45%
4	4%	61%
5	26%	43%
6	22%	44%
7	8%	23%
8	18%	51%
9	2%	16%
10	9%	66%
11	37%	27%
12	38%	31%
13	39%	74%

So that you may more easily study the reader interest variations of your own ads using different copy and different magazines, we have prepared "reader interest rating cards" for every advertiser appearing in any of the 3 big weeklies. Hundreds of admen have already requested their own cards. Write for yours. No obligation. Merely Liberty's contribution to a better understanding of what happens to advertisements after they are published. Address Liberty Research Dept., 420 Lexington Ave., N.Y.

Who reads the Big Weeklies?

The Percival White, Inc. investigators call at random, all over town, good neighborhoods, middling, poor. Wherever they find any of the three big weeklies they interview the reader. Here is where they found them this week.

	Per Cent of Interviews by Income Class of Readers			
This Week	A	B	C	D
Liberty	—	14%	86%	—
Second Weekly	—	10%	90%	—
Third Weekly	—	20%	80%	—
Seven Week Total				
Liberty	3%	50%	47%	—
Second Weekly	1%	49%	49%	1%
Third Weekly	4%	50%	45%	1%

How Choice of Magazine Varies Reader Interest for Your Advertisement

•

WEEK OF JUNE 18th

The average advertising page in Liberty stopped:

39% more persons than in 2nd weekly

74% more persons than in 3rd weekly

Watch next Thursday's issue of Automotive Daily News for the Best Read Ads of week of June 25th.

Advertiser: Chesterfield
Agency: Newell-Emmett
Space: Four Color Back Cover
Reader Interest: 100% Above Average Page

Advertiser: RCA Victor
Agency: Lord & Thomas
Space: Four Color Back Cover
Reader Interest: 65% Above Average Page

Liberty

America's ... BEST READ *Weekly*

✓ BEST READ ADS OF THE WEEK

JUNE 18

Major Specifications and Mechanical Details of 1932 Commercial Cars

LEADING MAKES NATIONALLY DISTRIBUTED

Make and Model	Capacity—Tons or Lbs.	Chassis Price	Engine	Valve Arr'g'm't	No. of Cyls.	Bore and Stroke	Piston Disp.	Tax H. P.	Max. Brake H. P. and Peak R. P. M.	Type Camshaft Drive	Radiator Make	Clutch Make	Universals Make	Steering Gear Make	Carburetor Make	Fuel Feed Type	Make Electr'l System	Make Transmission	No. Spds. For.	Rear Axle Make	Type Final Drive	Final Gear Reduction	Type Service Brakes	Area Service Brake Lining	Standard Wheel Base	Chassis Wgt.	Standard Tire Sizes Front	Standard Tire Sizes Rear
Austin	400	475	Own	L	4	2.2x3	45.6	7.8	13@3000	G	Hex	Rock	Spic	Own	Til	Gra	Aut	W-G	3	Sal	Sp	5.25	O4M	76.5	75	1210	18x3.75	18x3.75
Autocar R	1½	2250	Own	L	6	3⅜x4¾	314.0	33.7	75@2400	G	G & O	Br-L	Spic	Ross	Str	P	DR	Br-L	4	Own	Sp	33.4	4IH	388	*159	5350	20x7.00	20x7.00D
Autocar D	2-2½	3500	Own	L	6	4 x4¾	358.0	38.4	82@2400	G	Per	Long	Spic	Ross	Str	Vac	DR	Own	4	Own	2R	33.5	LO4IDV*	400	150	5600	20x8.25	20x8.25D
Autocar A	1½-2	3200	Own	L	6	4 x4¾	358.0	38.4	82@2400	G	G & O	Long	Spic	Ross	Str	P	DR	Own	5	Own	Sp	29.7	LO4IDV*	400	150	5400	20x8.25	20x8.25
†Autocar SH	2½-3	4300	Own	L	4	4¼x4¾	404.0	43.4	92@2400	G	Own	Long	Spic	Ross	Str	Gra	DR	Own	4	Own	2R	44.0	O2IM-T	328	114	6770	34x7	34x7D
†Autocar H	2½-3	4100	Own	L	4	4½x5½	350.0	32.4	45@1450	G	Own	Long	Spic	Ross	Str	Gra	DR	Own	4	Own	2R	48.6	O2IM	328	114	6770	34x7	34x7D
†Autocar HS	3-3½	4600	Own	L	4	4½x5½	350.0	32.4	45@1450	G	Own	Long	Spic	Ross	Str	Gra	DR	Own	4	Own	2R	54.3	O2IM	516	114	7600	40x8	40x8D
†Autocar SHS	3-3½	4800	Own	L	6	4¼x4¾	404.0	43.4	92@2400	G	Own	Long	Spic	Ross	Str	Gra	DR	Own	4	Own	2R	54.3	O2IM-T	518	114	8100	40x8	40x8D
Autocar N	3-3½	4600	Own	L	6	4¼x4¾	404.0	43.4	92@2400	G	Own	Long	Spic	Ross	Str	Vac	DR	Own	4	Own	2R	41.2	OL4IHV-T	574	174	7990	20x9.75	20x9.75D
Autocar TFA	3½-5	6100	Own	L	6	4½x4¾	453.0	48.6	101@2400	G	Own	Long	Spic	Ross	Str	Vac	DR	Own	12	Own	2R	101.3	LO4IDV	602	192	9300	20x10.50	20x10.50D
Autocar C	3½-5	5900	Own	L	6	4½x4¾	453.0	48.6	101@2400	G	Own	Long	Spic	Ross	Str	Vac	DR	Own	4	Own	2R	51.7	O4IMV-T	516	172	9500	24x10.50	24x10.50D
Autocar FE	7½	11000	Ster	L	6	5¼x6	780.0	66.2	156@1800	G	G & O	Br-L	Spic	Ross	Zen	P	NE	Br-L	12	Wis	2R	89.2	W4IA-T	674	180	12300	24x10.50	24x10.50D
*Autocar GE	10	12500	Ster	L	6	5¼x6	780.0	66.2	156@1800	G	G & O	Br-L	Spic	Ross	Zen	P	NE	Br-L	12	Tim	Wo	82.2	W6IA-T	720	198	16300	20x9.75	20x9.75D
Brockway 80 C	* 9500	1215	Con	L	6	3⅝x4	214.7	27.3	71@3200	C	G & O	Borg	Spic	Ross	Zen	P	Aut	W-G	4	Tim	Sp	36.2	CB4IM	248	149	4075	20x6.00	20x6.00D
Brockway 90 C	*11500	1525	Con	L	6	3⅝x4⅝	248.2	27.3	70@3200	C	G & O	Borg	Spic	Ross	Zen	P	Aut	W-G	4	Tim	Sp	37.4	L4IH	353	149	4355	20x6.50	20x6.50D
Brockway 92 C	*12500	1800	Con	L	6	3⅝x4⅝	248.2	27.3	70@3200	C	G & O	Borg	Spic	Ross	Zen	P	Aut	W-G	4	Tim	Sp	37.4	L4IH	353	149	4450	32x6	32x6D
Brockway 120 C	*15000	1990	Con	H	6	4 x4½	311.0	38.4	73@2400	C	G & O	Br-L	Spic	Ross	Zen	P	*Aut	Br-L	4	Tim	Sp	38.5	L4IH	353	156	5500	32x6	32x6D
Brockway 140 C	*17500	2495	Con	H	6	4 x4½	311.0	38.4	73@2400	C	G & O	Br-L	Spic	Ross	Zen	P	*Aut	Br-L	4	Wis	2R	43.5	L4IHV	386	156	6100	32x6	32x6D
Brockway 141 C	*19500	2935	Con	H	6	4 x4½	311.0	38.4	73@2400	C	G & O	Br-L	Spic	Ross	Zen	P	*Aut	Br-L	4	Wis	2R	46.2	L4IHV	380	170	6500	32x6	32x6D
Brockway 170 C	*19500	3160	Con	H	6	4½x4¾	380.9	40.8	89@2200	C	G & O	Br-L	Spic	Ross	Zen	P	*Aut	Br-L	4	Wis	2R	46.6	L4IHV	380	170	7100	32x6	32x6D
Brockway 175 C	*19500	3660	Con	H	6	4⅝x4¾	427.5	45.9	100@2200	C	G & O	Br-L	Spic	Ross	Zen	P	*Aut	Ful	5	Wis	2R	46.6	L4IHV	380	170	7200	34x7	34x7D
Brockway 195 C	*22000	3820	Con	H	6	4½x4¾	380.9	40.8	89@2200	C	G & O	Br-L	Spic	Ross	Zen	P	*Aut	Br-L	4	Wis	2R	52.4	L4IHV	471	170	8100	34x7	34x7D
Brockway 220 C	*25000	4568	Con	H	6	4⅝x4¾	427.5	45.9	100@2200	C	G & O	Br-L	Spic	Ross	Zen	P	*Aut	Br-L	4	Wis	2R	50.7	L4IHV	546	170	8675	36x8	36x8D
Brockway 260 C	*28000	5850	Con	H	6	4½x5¼	501.0	48.6	120@2200	C	G & O	Ful	Spic	Ross	Zen	P	*Aut	Ful	4	Wis	2R	50.7	L4IHV	546	212	9000	22x10.50	22x10.50D
Chevrolet	½	345	Own	H	6	3⅛x3¾	194.0	26.3	50@2600	G	Har	Own	Own	Own	Car	P	DR	Own	3	Own	Sp	13.6	O4IM	101	109	*1880	19x4.75	19x4.75
Chevrolet	1½	520	Own	H	6	3⅛x3¾	194.0	26.3	50@2600	G	Har	Own	Own	Own	Car	P	DR	Own	4	Own	Sp	33.4	——	—	131	2700	30x5	32x6
Chevrolet	1½	575	Own	H	6	3⅛x3¾	194.0	26.3	50@2600	G	Har	Own	Own	Own	Car	P	DR	Own	4	Own	Sp	33.4	O4IM	170	157	3015	30x5	30x5D
Diamond T 210	1½	595	Her	L	6	3⅜x4¼	228.	27.3	60@2400	G	G & O	Borg	Spic	Ross	Zen	P	Aut	W-G	4	Cla	Sp	—	L4IH	196	135½	3100	20x5.50B	20x4.50B
Diamond T 240 A	1¾	795	Her	L	6	3⅜x4¼	228.	27.3	60@2400	G	G & O	Borg	Spic	Ross	Zen	P	Aut	W-G	4	Cla	Sp	—	L4IH	219	137	3400	20x6.00B	32x6P
Diamond T 310	2	895	Her	L	6	3⅜x4¼	263.	31.5	65@2400	G	G & O	Borg	Spic	Ross	Zen	P	Aut	W-G	4	Cla	Sp	—	L4IH	350	155	4200	20x6.50B	20x6.50DB
Diamond T 410	3	1595	Her	L	6	3¾x4½	298.	33.7	68@2400	G	G & O	Borg	Spic	Ross	Zen	P	Aut	Cov	4	Cla	Sp	—	L4IHV	350	160¾	5400	20x7.50B	20x7.50DB
Diamond T 510	4	1995	Her	L	6	4 x4½	339.	38.4	75@2400	G	G & O	Cov	Spic	Ross	Zen	P	Aut	Cov	4	Tim	Sp	—	L4IHV	408	168	5000	20x7.00B	25x8.25DB
Diamond T 303 F B	2-2½	2425	Her	L	6	4 x4½	339.0	38.4	75@2400	G	G & O	Cov	Spic	Ross	Zen	P	L-N	Cov	4	Cla	Sp	—	L4IHV	408	169	6100	30x7.50	20x7.50DB
Diamond T 504 A	3	2650	Her	L	6	4 x4½	339.0	38.4	75@2400	G	G & O	Cov	Spic	Ross	Zen	P	Aut	Cov	4	Wis	2 R	—	L4IHV-T	408	176½	6400	20x8.25B	20x8.25DB
Diamond T 506 A	3	2950	Her	L	6	4¼x4½	383.0	43.3	91@2200	G	G & O	Cov	Spic	Ross	Zen	P	L-N	Cov	5	Wis	2 R	—	L4IHV-T	408	184	6400	20x8.25B	20x8.25DB
Diamond T 603	3-4	3395	Her	L	6	4⅜x4¾	428.4	45.9	94@2200	G	G & O	Cov	Spic	Ross	Zen	P	Aut	Cov	5	Wis	2 R	—	L4IHV-T	499	169	7500	20x9.00B	20x9.00DB
Diamond T 606 B	3-4	3695	Her	L	6	4½x5¼	501.0	48.6	110@2200	G	G & O	Cov	Spic	Ross	Zen	P	L-N	Cov	5	Wis	2 R	—	L4IHV-T	499	187½	7500	20x9.00B	20x9.00DB
Diamond T 750	4-5	4925	Her	L	6	4⅝x5¼	529.0	51.4	114@2200	G	G & O	Cov	Spic	Ross	Zen	P	Aut	Cov	5	Wis	2 R	—	W4IA	552	178	9300	22x9.75B	22x9.75DB
*Diamond T 801	4	4140	Her	L	6	4⅜x4¾	428.4	45.9	94@2200	G	G & O	Cov	Spic	Ross	Zen	P	Aut	Br-L	7	Own	Wo	—	L6IHV-T	571	189½	8300	26x8P	36x8P
*Diamond T 1201	6	5600	Her	L	6	4½x5¼	501.0	48.6	110@2200	G	G & O	Cov	SpicBlo	Ross	Zen	P	Aut	Br-L	7	Tim	Wo	—	W4IA-T	238	190	11000	34x7P	34x7DP
*Diamond T 1602	8	6400	Her	L	6	4⅝x5¼	529.0	51.3	114@2200	G	G & O	Cov	SpicBlo	Ross	Zen	P	Aut	Br-L	7	Tim	Wo	—	W4IA-T	238	190	11700	36x8P	36x8DP
*Diamond T 1603	8	7500	Wak	L	6	5 x5¾	677.4	60.0	125@2000	G	G & O	Br-L	SpicBlo	Ross	Zen	P	Aut	Br-L	7	Tim	Wo	—	W4IA-T	238	194	12500	36x8P	36x8D
Dodge Bros. UF 10	½	375	Own	L	4	3⅝x4¾	196.0	21.0	48@2800	G	Fed	Borg	Un	Own	Car	P	DR	Own	3	Own	Sp	12.8	O4IH	121	109	1925	19x5.00	19x5.00
Dodge Bros. F 10	½	445	Own	L	6	3¼x4¼	211.5	25.3	66@3200	C	Fed	Borg	Un	Owu	Car	P	DR	Own	3	Own	Sp	12.8	O4IH	121	109	1975	19x5.25	19x5.25
Dodge Bros. U 1	¾-1	490	Own	L	4	3⅝x4¼	196.0	21.0	45@2800	G	Fed	Borg	Spic	Han	Car	P	DR	Own	3	Own	Sp	19.2	O4IH	189	124	2260	20x6.00	20x6.00
Dodge Bros. DA 1	¾-1	595	Own	L	6	3⅜x3⅞	208.0	27.3	63@3200	C	Fed	Borg	Spic	Han	Zen	P	DR	Own	3	Own	Sp	19.2	O4IH	189	124	2360	20x6.00	20x6.00
Dodge Bros. U 1	1-1½	495	Own	L	4	3⅝x4¼	196.0	21.0	45@2800	G	Fed	Borg	Spic	Han	Car	P	DR	Own	4	Own	Sp	36.1	O4IH	206	133	2590	20x6.00	32x6
Dodge Bros. DA 1	1-1½	595	Own	L	6	3⅜x3⅞	208.0	27.3	63@3200	C	Fed	Borg	Spic	Han	Zen	P	DR	Own	4	Own	Sp	33.4	O4IH	206	133	2690	20x6.00	32x6
Dodge Bros. UG 30	1½-2	525	Own	L	4	3⅝x4¾	196.0	21.0	48@2800	G	Fed	Borg	Cle	Own	Car	P	DR	Own	5	Own	Sp	36.1	O4IH	176	131	2490	20x6.00	32x6
Dodge Bros. UG 31	1½-2	550	Own	L	4	3⅝x4¾	196.0	21.0	48@2800	G	Fed	Borg	Cle	Own	Car	P	DR	Own	5	Own	Sp	36.1	O4IH	176	131	2640	20x6.00	36x8
Dodge Bros. G 30	1½-2	585	Own	L	6	3¼x4¼	211.5	25.3	60@3100	C	Fed	Borg	Cle	Own	Car	P	DR	Own	5	Own	Sp	36.1	4HI	176	131	2560	20x6.00	32x6
Dodge Bros. UF 30	1½-2	595	Own	L	4	3⅝x4¾	196.0	21.0	48@2800	G	Fed	Borg	Cle	W-G	Car	P	DR	Own	5	Own	Sp	37.1	O4IH	187	136	2581	20x6.00	32x6
Dodge Bros. G 31	1½-2	610	Own	L	6	3¼x4¼	211.5	25.3	60@3100	C	Fed	Borg	Cle	Own	Car	P	DR	Own	4	Own	Sp	36.1	4HI	176	157	2710	20x6.00	32x6
Dodge Bros. UF 31	1½-2	670	Own	L	4	3⅝x4¾	196.0	21.0	48@2800	G	Fed	Borg	Cle	W-G	Car	P	DR	Own	4	Own	Sp	37.1	O4IH	229	165	2757	20x6.00	32x6
Dodge Bros. F 30	1½-2	695	Own	L	6	3¼x4¼	211.5	25.3	66@3200	C	Fed	Borg	Cle	W-G	Car	P	—	—	4	Own	Sp	37.1	O4IH	187	136	2631	20x6.00	32x6
Dodge Bros. F 31	1½-2	770	Own	L	6	3¼x4¼	211.5	25.3	66@3200	C	Fed	Borg	Cle	W-G	Car	P	DR	Own	4	Own	Sp	37.1	O4IH	229	165	2807	20x6.00	32x6
†Dodge Bros UGS 50	1½-3	875	Own	L	4	3⅝x4¾	196.0	21.0	48@2800	G	Fed	Borg	Cle	Own	Car	P	DR	Own	4	Own	Sp	36.1	O4IHV	176	153	——	20x6.00	32x6S
†Dodge Bros. GS 50	1½-3	935	Own	L	6	3¼x4¼	211.5	25.3	60@3100	C	Fed	Borg	Cle	Own	Car	P	DR	Own	4	Own	Sp	36.1	O4IHV	176	153	——	20x6.00	32x6S
Dodge Bros. F 35	1½-2½	1425	Own	L	6	3⅜x3⅞	208.0	27.3	63@3200	C	Fed	Borg	Cle	Han	Zen	P	DR	Own	4	Own	Sp	41.4	O4IH	305	140	3780	20x6.00	20x6.00D
Dodge Bros. F 36	1½-2½	1485	Own	L	6	3⅜x3⅞	208.0	27.3	63@3200	C	Fed	Borg	Cle	Han	Zen	P	DR	Own	4	Own	Sp	41.4	O4IH	305	165	3972	20x6.00	20x6.00D
Dodge Bros. G 43	2-3	795	Own	L	6	3¼x4¼	217.7	25.3	73@3200	C	Fed	Borg	Cle	Own	Car	P	DR	Own	4	Own	Sp	50.9	4HI	229	136	3345	20x7.00	20x7.00D
Dodge Bros. G 44	2-3	825	Own	L	6	3¼x4¼	217.7	25.3	73@3200	C	Fed	Borg	Cle	Own	Car	P	DR	Own	4	Own	Sp	50.9	4HI	229	165	3485	20x7.00	20x7.00D
*Dodge Bros. F 40	2-3½	1995	Own	L	6	3⅝x5	309.6	31.5	96@3000	G	Long	Borg	Cle	Sag	DL	P	DR	Own	4	Own	Sp	43.7	O4IH-T	350	150	5173	20x6.50	20x6.50D
*Dodge Bros. F 41	2-3½	2085	Own	L	6	3⅝x5	309.6	31.5	96@3000	G	Long	Borg	Cle	Sag	DL	P	DR	Own	4	Own	Sp	43.7	O4IH-T	350	165	5211	20x6.50	20x6.50D
Dodge Bros. F 42	2-3½	2180	Own	L	6	3⅝x5	309.6	31.5	75@3200	C	Fed	Borg	Cle	Own	Car	P	DR	Own	5	Own	Sp	50.0	O4IH-T	229	136	5311	20x6.50	20x6.50D
†Dodge Bros. GS 55	2-4	1260	Own	L	6	3¼x4¾	217.7	25.3	73@3200	C	Fed	Borg	Cle	Own	Car	P	DR	Own	5	Own	Sp	50.9	O4IHV	365	158	——	20x7.00	20x7.00D
Dodge Bros.	3-4	1515	Own	L	6	3⅜x4½	241.0	27.3	78@3000	C	Long	Borg	Un	Han	Zen	Vac	NE	Own	4	Own	Sp	46.3	O4IH	382	135	4235	32x6	32x6D
Dodge Bros.	3-4	1565	Own	L	6	3⅜x4½	241.0	27.3	78@3000	C	Long	Borg	Un	Han	Zen	Vac	NE	Own	4	Own	Sp	46.3	O4IH	382	165	4520	32x6	32x6D
Dodge Bros.	3-4	1615	Own	L	6	3⅜x4½	241.0	27.3	78@3000	C	Fed	Borg	Un	Han	Zen	Vac	NE	Own	4	Own	Sp	46.3	O4IH	382	185	4715	32x6	32x6D
Dodge Bros. F 60	3-5½	2645	Own	L	6	3⅝x5	309.6	31.5	96@3000	G	Long	Borg	Cle	Sag	DL	P	DR	Own	4	Own	2 R	56.6	O4IH-T	416	146	5543	32x6	32x6D
*Dodge Bros. F 61	3-5½	2575	Own	L	6	3⅝x5	309.6	31.5	96@3000	G	Long	Borg	Cle	Sag	DL	P	DR	Own	4	Own	Sp	48.8	O4IH-T	416	170	5789	32x6	32x6D
*Dodge Bros. F 62	3-5½	2695	Own	L	6	3⅝x5	309.6	31.5	96@3000	G	Long	Borg	Cle	Sag	DL	P	DR	Own	4	Own	Sp	48.8	O4IH-T	416	195	5901	32x6	32x6D
Dodge Bros. G 80	4-7½	5250	Own	L	8	3½x5	384.8	39.2	120@3000	G	Long	Borg	Cle	Sag	Str	P	DR	Own	5	Own	Sp	62.7	B4IA-T	650	146	7640	20x9.75	20x9.75D
Dodge Bros. G 81	4-7½	5285	Own	L	8	3½x5	384.8	39.2	120@3000	G	Long	Borg	Cle	Sag	Str	P	DR	Own	5	Own	Sp	69.6	B4IA-T	650	170	7840	20x9.75	20x9.75D
Dodge Bros. G 82	4-7½	5350	Own	L	8	3½x5	384.8	39.2	120@3000	G	Long	Borg	Cle	Sag	Str	P	DR	Own	5	Own	Sp	69.6	B4IA-T	650	195	8040	20x9.75	20x9.75D
Dodge Bros. G 83	4-7½	5415	Own	L	8	3½x5	384.8	39.2	120@3000	G	Long	Borg	Cle	Sag	Str	P	DR	Own	5	Own	Sp	69.6	B4IA-T	650	220	8400	20x9.75	20x9.75D
Essex Com.	¾	435	Own	L	6	2¾x4½	163.0	18.2	55@3300	C	Har	Own	Spic	Gem	Mar	Vac	Aut	Own	3	Own	Sp	5.40	4M	147	110½	1970	20x5	20x5.50
Federal D 3	*1½	670	Con	L	4	3⅞x4¼	200.5	24.0	50@2700	C	Long	Borg	Cle	Gem	Zen	P	DR	W-G	4	Cla	Sp	40.8	L41H	377	130	3225	20x6.00	32x6
Federal E 3	*1½	695	Con	L	6	3⅜x4	215.0	27.3	72@3400	C	Long	Borg	Cle	Gem	Zen	P	DR	W-G	4	Cla	Sp	40.8	L41H	377	130	3225	20x6.00	32x6
Federal F 7	*1¾	1325	Con	L	6	3⅝x4⅝	248.0	27.3	64@2600	C	Long	Borg	Pet	Gem	Zen	P	DR	Own	4	Tim	Sp	29.2	L41H	413	132	3765	30x5	30x5D
Federal F 8	*1¾-2	1425	Con	L	6	3⅝x4⅝	248.0	27.3	64@2600	C	Long	Borg	Pet	Gem	Zen	P	DR	Own	4	Tim	Sp	34.0	L41H	438	132	3865	30x5	30x5D
Federal G 5	2	995	Con	L	6	3⅜x4	215.0	27.0	72@3400	C	Long	Borg	Cle	Gem	Zen	P	DR	W-G	4	Tim	Sp	6.80	L4IH	269	132	3800	20x6.50B	20x6.50DB
Federal A 6	*2	1695	Con	L	6	3⅝x4⅝	248.0	27.3	64@2600	C	Long	Borg	Pet	Ross	Zen	Vac	DR	Own	4	Cla	Sp	38.5	L41H	450	151	4580	32x6	32x6D
Federal A 6 T	*2½	1995	Con	L	6	3⅝x4⅝	248.0	27.3	64@2600	C	Long	Borg	Pet	Ross	Zen	Vac	DR	Own	4	Tim	Sp	47.1	L41HV	659	151	5110	32x6	32x6D
Federal A 6 T W	*2½	2130	Con	L	6	3⅝x4⅝	248.0	27.3	64@2600	C	Long	Borg	Pet	Ross	Zen	Vac	DR	Own	4	Tim	Sp	52.9	L41HV	659	151	5110	32x6	32x6D
Federal T 3 W	*2¼	1595	Wau	L	4	4 x5	251.0	25.6	50@2000	G	Long	Borg	Pet	Ross	Zen	Vac	DR	Own	4	Tim	Wo	36.3	L41H	575	148	5110	32x6	36x8
Federal T 8 W F	*2½	1795	Con	L	6	3⅜x4⅜	248.0	27.3	64@2600	C	Long	Borg	Pet	Ross	Zen	Vac	DR	Own	4	Tim	Wo	38.8	L41HV	659	148	5400	32x6	32x6D
*Federal D 2 S W	*2½-3	1050	Con	L	4	3⅞x4¼	200.5	24.0	50@2700	C	Long	Borg	Cle	Gem	Zen	P	DR	W-G	4	Cla	Sp	40.8	L61H	566	140	3925	20x6.00	32x6
*Federal E 2 S W	*2½-3	1150	Con	L	6	3⅜x4	215.0	27.3	60@2600	C	Long	Borg	Cle	Gem	Zen	P	DR	W-G	4	Cla	Sp	40.8	L61H	566	145	3975	20x6.00	32x6
*Federal D 2 D	*2½-3	1350	Con	L	4	3⅞x4¼	200.5	24.0	50@2700	C	Long	Borg	Cle	Gem	Zen	P	DR	W-G	4	Cla	Sp	40.8	L61H	566	140	4235	20x6.00	32x6
*Federal E 2 D	*2½-3	1450	Con	L	6	3⅜x4	215.0	27.3	60@2600	C	Long	Borg	Cle	Gem	Zen	P	DR	W-G	4	Cla	Sp	40.8	L61H	566	145	4310	20x6.00	32x6
Federal T 10 B	*2½-3	2550	Con	H	6	4 x4½	311.0	38.4	75@2200	C	Long	Borg	Pet	Ross	Zen	P	DR	Own	4	Tim	Sp	44.5	L41HV	659	165	6550	34x7	34x7D
Federal T 10 W	*2½-3	2685	Con	H	6	4 x4½	311.0	38.4	75@2200	C	Long	Borg	Pet	Ross	Zen	P	DR	Own	4	Tim	Sp	44.0	L41HV	659	165	6550	34x7	34x7D
Federal T 10 D R	*2½-3	2685	Con	H	6	4 x4½	311.0	38.4	75@2200	C	Long	Borg	Pet	Ross	Zen	P	DR	Own	4	Tim	2R	45.6	L41HV	659	165	6550	34x7	34x7D
Federal U 6	*3½-4	3860	Con	H	6	4½x4¾	381.0	40.8	85@2200	C	Long	Borg	Pet	Ross	Zen	P	DR	Br-L	7	Tim	Wo	64.6	L41HV	767	165	7420	36x8	36x8D
Federal U 6 D R	*3½-4	3860	Con	H	6	4½x4¾	381.0	40.8	85@2200	C	Long	Borg	Pet	Ross	Zen	P	DR	Br-L	7	Tim	2R	69.6	L41HV	767	168	7420	36x8	36x8D
*Federal A 6 S W	*4	2195	Con	L	6	3⅜x4⅝	248.0	27.3	64@2600	C	Long	Borg	Pet	Ross	Zen	Vac	DR	Own	4	Cla	Sp	38.5	L61HV	675	164	5620	32x6	32x6D
Federal C 7	*5-6	4485	Con	H	6	4⅜x4¾	428.4	45.9	100@2200	C	Long	Borg	Pet	Han	Zen	P	DR	Br-L	7	Tim	2R	75.2	L41HV	866	195	9550	20x9.75	20x9.75D
Federal C 7 W	*5-6	4485	Con	H	6	4⅜x4¾	428.4	45.9	100@2200	C	Long	Borg	Pet	Han	Zen	P	DR	Br-L	7	Tim	W	78.0	L41HV	866	195	9550	20x9.75	20x9.75D
Federal C 8	*5-6	4895	Con	H	6	4⅜x4¾	428.4	45.9	100@2200	C	Long	Borg	Pet	Han	Zen	P	DR	Br-L	7	Tim	2R	75.2	L41A	921	195	9650	20x9.75	20x9.75D
Federal C 8 W	*5-6	4895	Con	H	6	4⅜x4¾	428.4	45.9	100@2200	C	Long	Borg	Pet	Han	Zen	P	DR	Br-L	7	Tim	Wo	78.0	L41A	921	195	9650	20x9.75	20x9.75D
Federal X 8	*7½	4335	Con	L	4	5 x6	471.0	40.0	61@1350	G	Long	Borg	Pet	Gem	Zen	Vac	AB	Br-L	7	Tim	Wo	111.0	T21IMV	603	162	9750	36x6S	40x14S
Federal X 8 D R	*7½	4335	Con	L	4	5 x6	471.0	40.0	61@1350	G	Long	Borg	Pet	Gem	Zen	Vac	AB	Br-L	7	Tim	2R	106.0	T21IMV	603	162	9750	36x6S	40x14S
Federal X 8 R	*7½	4735	Con	H	6	4⅜x4¾	428.4	45.9	100@2200	C	Long	Borg	Pet	Ross	Zen	P	DR	Br-L	7	Tim	Wo	111.0	T21MV	462	162	10475	40x8	40x8D
Federal X 8 R D R	*7½	4735	Con	H	6	4⅜x4¾	428.4	45.9	100@2200	C	Long	Borg	Pet	Ross	Zen	P	DR	Br-L	7	Tim	2R	106.0	T21MV	462	162	10475	40x8	40x8D
*Federal T 10 SW	8	3895	Con	H	6	4 x4½	339.0	38.4	80@2200	C	Long	Borg	Pet	Ross	Zen	P	DR	Br-L	7	Tim	Sp	74.1	L6IHV	986	188	9600	34x7	34x7D
Ford	—	320	Own	L	4	3⅞x4¼	200.5	—	50@2800	G	Own	Long	Spic	Gem	Zen	Gra	Own	Own	4	Own	Sp	——	O4IH	186	106	——	20x6.00B	20x6.00DB
Ford	1½	470	Own	L	4	3⅞x4¼	200.5	—	50@2800	G	Own	Long	Spic	Gem	Zen	Gra	Own	Own	4	Own	Sp	——	O4IM	474⅞	131	——	20x6.00B	20x6.00DB
Ford	1½	500	Own	L	4	3⅞x4¼	200.5	—	50@2800	G	Own	Long	Spic	Gem	Zen	Gra	Own	Own	4	Own	Sp	——	O4IM	474⅞	157	——	20x6.00B	20x6.00DB
General Motors T-15	*6500	645	Own	L	6	3⅛x3⅞	200.3	26.3	60@3000	G	Long	Own	Mec	Sag	Mar	P	DR	Own	3	Own	Sp	16.1	B4IM	211	130	2625	20x5.50B	20x5.50B
General Motors T-18	*8200	595	Own	L	6	3⅛x3⅞	200.3	26.3	66@3200	G	Long	Own	Own	Sag	Mar	P	DR	Own	4	Own	Sp	35.7	O4IM	175	131	2785	30

OUTLINE OF METHODS USED BY BIG FLEET OERATORS IN TRAINING DRIVER - SALESMEN

By S. M. NELSON

Methods of training driver-salesmen, as found most effective by ten industries operating large truck fleets, are disclosed in a survey recently made by the Policyholders Service Bureau of the Metropolitan Insurance Company.

Training in sales meetings is perhaps the most popular method used by the majority of the industries surveyed. These meetings vary greatly in character and in the way they are organized, developed and actually used for training.

The companies considered in this report appear to be about equally divided as to the practice of holding weekly or bi-weekly meetings. A few report monthly meetings. One company, with 600 truck drivers, holds short daily meetings. Another holds a meeting of the routemen of one supervisor each week and so rotates from group to group through the sales force.

Some companies report a varied schedule. One company conducts a short daily meeting, a weekly breakfast meeting, and general meetings. Several companies report holding weekly or bi-weekly meetings for each supervisor's group and a monthly or bi-monthly meeting of all of the routemen. Others hold short periodic meetings during the year and longer meetings once or twice a year.

As a rule the time of the meeting depends on the hours and conditions of work. Some companies report holding meetings as early as 5.30 in the morning, some breakfast meetings, some forenoon meetings, and others luncheon meetings, afternoon meetings, dinner meetings and evening meetings.

The majority of companies definitely limit the length of their meetings. The favorite period is an hour to an hour and a half, although meetings as brief as a half hour, and as long as two or more hours, were reported.

Some companies report specially equipped rooms for their meetings. Others say they conduct their meetings in one of the rooms in the plant, or in the cafeteria, or dining room, or away from the plant. On the latter point, one company says:

"Our thought in holding the meetings outside the plant is to get the men away from the place where they spend the greater portion of their time. We want their minds free from the cares and details of their regular work, so that they will have full opportunity to absorb the ideas offered during the meeting."

Refreshments are served by many companies, either because of the hour of the meeting or to promote sociability. Some companies report holding regular dinner meetings. Others say they serve light refreshments at some of the meetings—as at their breakfast or luncheon meetings—and regular dinners occasionally.

A number of companies state that they make attendance compulsory and call absentees to account. It appears to be a general practice to open the meeting with a roll call. In some instances, fines are assessed against late arrivals. On the other hand, several companies say they try to make the meetings so interesting that the men will attend voluntarily.

A number of companies report that they take minutes of the proceedings. One company, for instance, sends copies of the various department heads. Another company requires that parts of the minutes be read to the office girls who contact customers by telephone. A third company rewrites its minutes and distributes copies to each routeman.

The choice of person to conduct the meeting varies with the company—all the way from the president down the line to the route man himself. A number of companies report that they allow a driver-salesman to preside at some sessions. This, they believe, develops leadership in the men. One company states:

"At times we allow one of the drivers to act as chairman, and so rotate within the group. Not all men, of course, are competent to act as chairman, but it is good training for those who qualify."

Another company advises:

"Certain of the meetings are placed in charge of the different drivers and they conduct them according to their own ideas. We have found this very satisfactory. The men feel they can talk more freely when one of their own number is presiding."

Along the same line is the comment of another company:

"We believe in as much self-government as possible, and rather than give orders, we find it more successful to have the route men make their own rules, and decide upon their own policies. By so doing there can be no comeback as to the best methods of any particular matter. This self-government is, of course, more or less definitely controlled."

In these sales meetings one or more of the three educational procedures—informing, instructing and developing—are used. The tendency, however, appears to be toward the use of the developing procedure. This, for example, is the belief of the general manager of a growing and progressive company:

"The developing and conferring procedures are the only effective ways of teaching route salesmen. I am becoming more convinced of this each day. In this company I am using the developing procedure until my route men reach the point in their development where I believe the conferring procedure could be used more advantageously."

This general manager holds regular weekly meetings of his route salesmen from 4 to 5 in the afternoon in a building several blocks from the plant. The meetings are attended by the route men, the supervisors and an assistant to the general manager, who records the proceedings. Later the proceedings are summarized by the general manager and a copy distributed to each man. Attendance is checked and late comers are fined.

The company with which the above executive is identified is gradually standardizing on all operations and, in accordance with this policy, is building up standards for operating the routes. These standards are being partially developed in the meetings and are being taught to the men at the same time In these meetings the developing method of training is employed. This procedure is illustrated by the following account of a typical meeting:

Before the meeting began the following outline was written on the blackboard by the general manager:

PREMISES

1. My interests are the customer's interest; my viewpoint must be her viewpoint.
2. I can never assume to know what her interests are; I can take nothing for granted.

SOME CUSTOMERS' INTERESTS

1. Names and kinds of services.
2. When to expect delivery.
3. How much it will cost.

(Continued on Page 15)

LACK OF MAINTENANCE FUND THREATENS ROADS

Washington, June 29. — Motordom's huge investment in highways today faces a grave menace in the sharp curtailment of funds for maintenance, and, unless the situation is recognized and immediately corrected, a return to primitive road conditions is inevitable, according to a warning sounded today by the American Road Builders' Association. Reports to headquarters of the organization from all parts of the country clearly reveal that the contraction in state, county and city budgets not only has affected new highway construction but portends serious destruction for those already built.

In launching a campaign to bring the threatening condition to the attention of the nation's motorists, T. H. Cutler, president of the American Road Builders' Association, points out that the situation already has reached a stage of acuteness which dictates that the Federal government may be forced to maintain Federal-aid highways in some states.

Now! White AND INDIANA

THE MOST PROFITABLE FRANCHISE IN THE TRUCK INDUSTRY

JUST ANNOUNCED

New INDIANA SERIES 85

10,000 Lbs. GROSS

$885

chassis at factory

The new Indiana Series 85 is the outstanding value in the 1½-ton All-Truck field. A few of its features include: 6-Cylinder Power, Speed and Flexibility—Low Price—4-Wheel Hydraulic Brakes—7-Bearing Crankshaft—Five Available Wheelbases—Truck Type Tires, Heavy Duty Rims—Chassis Weight 3,900 Pounds, Proof of All-Truck Construction—World Wide Service.

Study the 10 White-Indiana points of advantage listed below—each separately a powerful attraction—all, taken together, the surest sales and profit opportunity for Dealers in the motor truck and coach industry.

The White and Indiana lines go beyond any competitor in covering the price and quality markets, from $885 up. You handle products established in public preference by many years of performance—you have a lower-cost time payment plan, more liberal credit support—you work with the fullest national and local advertising support—you get factory service on parts and individual sales assistance from the nearest White Factory Branch—you profit from national sales and service.

These are some of the advantages that mean more sales, more profits—increased local prestige and business soundness throughout the years—for White and Indiana dealers.

A few territories are still available. Get the full facts *now* on the new White and Indiana Dealer Franchise. Write or wire The White Company, Cleveland.

ONLY WHITE AND INDIANA DEALERS HAVE ALL THESE ADVANTAGES:

1. MORE PROFITS IN 1932
The practical opportunity to make more sales—be in on more deals—both trucks and coaches.

2. STABILITY AND LEADERSHIP OF COMPANIES
Now, more than ever, the support of strong, established companies is necessary to permanent business—and you can figure the added advantage of 70% repeat business to be expected from White and Indiana sales.

3. COMPLETE LINE
The widest range of models and prices in the industry—a truck or coach for every buyer—from the lowest priced to the highest quality.

4. GREATEST VALUE
Every truck chassis All-Truck—designed and built specifically for Truck work—no compromise—cannot be equaled, point for point and dollar for dollar.

5. WORLD-WIDE SERVICE
The White and Indiana Dealer is a link in a world-wide service system. He is in line for profitable business from long distance operators passing through his territory. World-Wide Service also helps the Dealer to make sales, particularly to cross-country operators.

6. LIBERAL DISCOUNT
You have only to ask our representative for the details.

7. PARTS AND REPAIRS PROFITS
Genuine White and Indiana parts are sold to dealers at a discount, assuring you profitable volume with a low inventory, due to the accessibility of branch parts stock.

8. BETTER DEALER FLOOR PLAN
Only 10% down for 90 days—through the White Motor Securities Corporation.

9. LOWER FINANCE CHARGE
Time payments at less cost to customers—through the White Motor Securities Corporation—handling your time paper. Your capital is freed for local operations.

10. SALES ASSISTANCE
Individual sales assistance or counsel—always immediately available—from your nearby White Branch—when you call for it.

THE ONE FRANCHISE THAT DOES NOT FORGET THAT THE DEALER MUST PROFIT

Major Specifications and Mechanical Details of 1932 Commercial Cars

LEADING MAKES NATIONALLY DISTRIBUTED

(Continued from page 12)

Make and Model	Capacity—Tons or Lbs.	Chassis Price	Engine	Valve Arr'g'm't	No. of Cyls.	Bore and Stroke	Piston Disp.	Tax H P.	Max. Brake H. P. and Peak R. P. M.	Type Camshaft Drive	Radiator Make	Clutch Make	Universals Make	Steering Gear Make	Carburetor Make	Fuel Feed Type	Make Electr'l System	Make Transmission	No. Spds. For.	Rear Axle Make	Type Final Drive	Final Gear Reduction	Type Service Brakes	Area Service Brake Lining	Standard Wheel Base	Chassis Wgt.	Standard Tire Sizes Front	Rear
Indiana 95 DR	2½	1275	Her	L	6	3¾x4¼	282.0	33.7	90@2500	G	Yo	Br-L	Spic	Ross	Str	P	Aut	Br-L	4	Wis	2R	41.2	L4IH	353	141	4650	20x7.50	20x7.50DB
Indiana 105	2½	1775	Her	L	6	3¾x4¼	282.0	33.7	90@2500	G	Yo	Br-L	Spic	Ross	Str	P	Aut	Br-L	4	Tim	Sp	48.3	L4IHV	383	156	5800	20x8.25	20x8.25D
Indiana 17	2½	2450	Her	L	6	4⅜x4¾	428.4	45.9	94@2200	G	Yo	Br-L	Spic	Ross	Str	P	Aut	Br-L	4	Tim	Sp	37.8	L4IHV	398	170	7000	20x8.25	20x8.25D
*Indiana 95 SBT 150	3	1675	Her	L	6	3¾x4¼	282.0	33.7	90@2500	G	Yo	Br-L	Spic	Ross	Str	P	Aut	Br-L	4	Tim	Sp	45.8	6HV	559	168	6500	32x6	32x6DP
*Indiana 95 SW 75	3	1735	Her	L	6	3¾x4¼	282.0	33.7	90@2500	G	Yo	Br-L	Spic	Ross	Str	P	Aut	Br-L	4	Tim	Wo	45.8	6HV	459	186	6200	32x6	32x6DP
Indiana 17 DR	3	2675	Her	L	6	4⅜x4¾	428.4	45.9	94@2200	G	Yo	Br-L	Spic	Ross	Str	P	Aut	Br-L	4	Wis	2R	38.6	L4IHV	398	170	7300	20x8.25	20x8.25D
Indiana 17 W	2½	2675	Her	L	6	4⅜x4¾	428.4	45.9	94@2200	G	Yo	Br-L	Spic	Ross	Str	P	Aut	Br-L	4	Tim	Wo	38.1	L4IHV	398	170	7000	20x8.25	20x8.25D
Indiana 19 DR	3½	3400	Her	L	6	4⅜x4¾	428.4	45.9	94@2200	G	Yo	Br-L	Spic	Ross	Str	P	Aut	Br-L	4	Wis	2R	52 3	L4IHV	489	170	8100	20x9.00	20x9.00D
Indiana 17 SBT 251	4	3250	Her	L	6	4⅜x4¾	428.4	45.9	94@2200	G	Yo	Br-L	Spic	Ross	Str	P	Aut	Br-L	4	Tim	Sp	37.8	L4IHV	625	188	8200	34x7	34x7D
*Indiana 17 SW 251	4	3475	Her	L	6	4⅜x4⅝	428.4	45.9	94@2200	G	Yo	Br-L	Spic	Ross	Str	P	Aut	Br-L	4	Tim	Wo	38.1	L4IHV	625	188	8500	34x7	34x7D
Indiana 43 DR	4	4300	Her	L	6	4½x5¼	501.0	48.6	110@2200	G	Yo	Br-L	Spic	Ross	Str	P	Aut	Br-L	4	Wis	2R	50.7	L4IHV	546	170	8500	20x9.75	20x9.75D
Indiana 45 DR	5	4800	Her	L	6	4⅝x5¼	529.0	51.3	115@2200	G	Yo	Br-L	Spic	Ross	Str	P	Aut	Br-L	4	Wis	2R	45.4	L4IHV	546	170	8700	20x9.75	20x9.75D
International A 1	¾	615	Wak	L	4	3⅜x4½	186.0	21.0	39@2400	G	Mod	Mec	Mec	Ross	Zen	Vac	DR	W-G	4	Own	Sp	39.5	B4IM	212	136	*2887	20x5.50	20x5.50
International A 2	1½	615	Wak	L	4	3⅜x4½	186.0	21.0	39@2400	G	Mod	Mec	Mec	Ross	Zen	Vac	DR	W-G	4	Own	Sp	39.5	B4IM	212	136	2935	20x6.00	20x6.00
International B 2	1½	665	Wak	L	4	3⅜x4½	186.0	21.0	39@2400	G	Mod	Mec	Mec	Ross	Zen	Vac	DR	Mec	6	Own	Sp	47 3	B4IM	212	136	2945	20x6.00	20x6.00
International A L 3	1½	1450	Lyc	L	6	3¼x4½	224.0	25.3	54@2700	G	Mod	Own	Mec	Ross	Zen	Vac	DR	W-G	4	Own	Sp	42 9	B4IM	295	138	4012	20x6.00	20x6.00D
International A 3	1½	795	Lyc	L	6	3¼x4½	224.0	25.3	54@2700	G	Mod	Rock	Mec	Ross	Zen	P	DR	W-G	4	Own	Sp	33.8	B4IM	287	136	3572	20x6.00	20x6.00
International A 3½	1½	1250	Lyc	L	6	3¼x4½	224.0	25.3	54@2700	G	Mod	Rock	Mec	Ross	Zen	P	DR	W-G	4	Own	Sp	34.9	B4IM	302	136	3600	20x6.00	20x6.00D
International A 4	2	1750	Own	H	6	3⅝x4½	279.0	31.5	67@2600	G	Mod	Own	Mec	Ross	Zen	Vac	DR	Own	5	Own	Sp	47.8	B4IH*	378	145	5221	32x6	32x6D
International W 1	2½	3850	Hall	H	4	4¼x5½	312.0	28.9	59@2000	C	Own	Own	Own	Own	Zen	Vac	RB	Own	5	Own	2R	60.5	BO4IM*	710	148	8300	36x5S	36x8S
International A 5	3	2350	Own	H	6	3⅝x4½	279.0	31.5	67@2600	G	Mod	Own	Mec	Ross	Zen	Vac	DR	Own	5	Own	Sp	52.6	B4IM*	430	156	5895	34x7	34x7D
International A 6	3	2675	Own	H	6	3⅝x4½	279.0	31.5	67@2600	G	Mod	Own	Mec	Ross	Zen	Vac	DR	Own	5	Own	Sp	62.5	B4IM*	430	156	6120	34x7	34x7D
International W 3	3½	4850	Hall	H	4	4¾x5½	390.0	36.1	69@2000	C	Own	Own	Own	Own	Zen	Vac	RB	Own	5	Own	2R	70.5	BO4IM*	794	160	10125	36x6S	40x12S
International A 7	5	6200	Own	H	6	4½x5½	525.0	48.6	93@1800	G	Mod	Rock	Mec	Ross	Zen	P	DR	Own	5	Own	2R	52.3	BO4IM-T	730	160	11590	20x9.75	20x9.75D
International A 8	5	6300	Own	H	6	5 x5½	650.0	60.0	115@1800	G	Mod	Rock	Mec	Ross	Zen	P	DR	Own	5	Own	2R	52.3	BO4IM-T	730	160	11590	20x9.75	20x9.75D
La France Rep. A 1	* 6000	795	Lyc	L	6	3 x4¾	201.5	21.5	60@2500	G	G&O	Borg	Spic	Han	Zen	Vac	Aut	Ful	4	Tim	Sp	36.1	L4IH	378	132	3000	20x5.50	32x6
La France Rep. C 1	* 7500	1295	Lyc	L	6	3¼x4½	224.0	25.4	61@2750	G	G&O	Borg	Spic	Han	Zen	Vac	Aut	Ful	4	Tim	Sp	35.8	L4TH	413	144	3300	20x6.00	32x6
La France Rep. D 1	* 9000	1595	Lyc	L	6	3¼x4½	224.0	25.4	61@2750	G	G&O	Borg	Spic	Han	Zen	Vac	Aut	Ful	4	Tim	Sp	37.9	L4IH	448	144	3725	30x5	30x5D
La France Rep. C 2	*10000	995	Lyc	L	6	3¼x4½	224.0	25.3	61@2750	G	Per	Borg	Spic	Ross	Zen	P	Aut	Ful	4	Tim	Sp	35.9	L4TH	448	150	3800	20x6.00B	20x6.00DB
La France Rep. D 2	*11500	1295	Lyc	L	6	3⅜x4½	242.0	27.3	65@2800	G	Per	Borg	Spic	Ross	Zen	P	Aut	Ful	4	Tim	Sp	37.9	L4IH	448	162	4600	20x6.50	20x6.50D
La France Rep. E 1	*13000	1985	Bud	L	6	3½x4½	260.0	29.5	69@2600	G	Per	Borg	Spic	Ross	Zen	Vac	Aut	Ful	4	Tim	Sp	47.0	L4IHV	578	162	5000	20x7.50	20x7.50D
La France Rep. F 3	*15000	2435	Lyc	L	6	3¾x4½	299.0	33.7	80@2500	G	Per	Ful	Spic	Ross	Zen	P	Aut	Ful	4	Tim	Sp	50.6	L4IHV-T	656	174	5625	34x7	34x7D
La France Rep. H 2	*16000	2985	Lyc	L	6	3⅞x5	354.0	36.0	85@2300	G	Per	Ful	Spic	Ross	Zen	P	Aut	Ful	4	Wis	2R	41.6	L4IHV-T	658	174	6370	34x7	34x7D
La France Rep. H 3	*18000	3395	Bud	L	6	4⅛x4¾	393.0	42.1	94@2400	G	Per	Ful	Spic	Ross	Zen	P	Aut	Ful	4	Tim	2R	54.0	L4IHV-T	768	179	7450	20x9.75B	20x9.75DB
La France Rep. M 2	*20000	4000	Wak	L	6	4⅜x5⅛	467.0	46.0	97@2000	G	Per	Ful	Spic	Ross	Zen	P	Aut	Ful	5	Wis	2R	51.0	L4IHV-T	768	174	7500	36x8	36x8D
La France Rep. M 3	*22000	4750	Wak	L	6	4⅜x5⅛	462.0	46.0	97@2000	G	Per	Ful	Spic	Ross	Zen	P	Aut	Ful	5	Tim	2R	62.5	L4IHV-T	768	191	8300	20x10.50B	20x10.50DB
La France Rep. 35-2	*24000	5600	Wak	L	6	4½x5⅜	549.0	48.6	98@1850	G	Own	Ful	Spic	Ross	Zen	P	Aut	Ful	4	Wis	2R	46.3	L4IHV-T	870	174	9250	38x9	38x9D
La France Rep. 35-3	*28000	6400	Wak	L	6	4⅜x5⅛	517.0	51.0	100@1800	G	Per	Ful	Spic	Ross	Zen	P	Aut	Ful	12	Tim	2R	111.5	W4IA-T	1054	191	10300	24x10.50B	24x10.50DB
La France Rep. Q 4	*30000	10000	Own	H	12	4 x5	754.0	76.7	240@2300	C	Own	Long	Blo	Ross	Zen	P	DR	Br-L	4	Tim	2R	Opt	W4IA-T	1054	Opt	12750	24x10.50B	24x10.50DB
La France Rep. Q 6	*40000	12000	Own	H	12	4 x5	754.0	76.7	240@2900	C	Own	Long	Blo	Ross	Zen	P	DR	Br-L	4	Tim	4R	Opt	W6IA-T	1520	Opt	14900	20x10.50B	20x10.50DB
Mack B G	——	2500	Own	L	6	3¼x5	248.9	25.4	41@2600	G	Own	Own	Spic	Gem	Str	P	NE	Own	4	Tim	Sp	Opt	L4IH	302	148	4200	20x6.00B	20x6.00DB
Mack B L	——	3000	Own	L	6	3⅝x5	309.6	31.6	75@2500	G	Own	Own	Spic	Own	Str	P	NE	Own	4	Own	Sp	Opt	O4IV	427	156	4950	32x6P	32x6DP
Mack B F	——	4200	Own	L	6	3⅝x5	309.6	31.6	75@2500	G	Own	Own	Spic	Han	Str	P	NE	Own	4	Own	2R	Opt	O4IV	427	156	6600	20x8.25B	20x8.25DB
Mack A B-4	——	4000	Own	L	4	4¼x5	283.7	28.9	63@2100	G	Own	Own	Spic	Own	Str	Gra	NE	Own	4	Own	Ch	Opt	O4IV	471	146½	6450	34x7P	34x7DP
Mack A B-4	——	4200	Own	L	4	4¼x5	283.7	28.9	63@2100	G	Own	Own	Spic	Own	Str	Gra	NE	Own	4	Own	2R	Opt	O4IV	471	164½	6850	34x7P	34x7DP
Mack A B-6	——	4150	Own	L	6	3⅜x5	309.6	31.6	75@2500	G	Own	Own	Spic	Own	Str	P	NE	Own	4	Own	Ch	Opt	O4IV	471	146½	6450	34x7P	34x7DP
Mack A B-6	——	4500	Own	L	6	3⅜x5	309.6	31.6	75@2500	G	Own	Own	Spic	Own	Str	P	NE	Own	4	Own	2R	Opt	O4IV	471	164½	6850	34x7P	34x7DP
Mack B M	——	4700	Own	L	6	4 x5½	414.7	38.4	94@2400	G	Own	Own	Spic	Han	Str	P	NE	Own	4	Own	2R	Opt	O4IV	427	157	7500	20x9.00B	20x9.00DB
Mack B C	——	5500	Own	L	6	4 x5½	414.7	38.4	94@2400	G	Own	Own	Spic	Own	Str	P	NE	Own	4	Own	Ch	Opt	O4IV	590	154	8000	36x8P	36x8DP
Mack B C	——	5250	Own	L	6	4 x5½	414.7	38.4	94@2400	G	Own	Own	Spic	Own	Str	P	NE	Own	4	Own	2R	Opt	O4IV	610	154	7850	36x8P	36x8DP
Mack B X	——	5750	Own	L	6	4¼x5½	468.1	43.3	104@2300	G	Own	Own	Spic	Ross	Str	P	NE	Own	4	Own	Ch	Opt	O4IV	619	160	7900	22x9.75B	22x9.75DB
Mack B X	——	5600	Own	L	6	4¼x5½	468.1	43.3	104@2300	G	Own	Own	Spic	Ross	Str	P	NE	Own	4	Own	2R	Opt	O4IV	619	160	8050	22x9.75B	22x9.75DB
Mack B J	——	6450	Own	L	6	4½x5½	525.5	48.6	125@2300	G	Own	Own	Cle	Han	Str	P	NE	Own	4	Own	2R	Opt	O4IV	618	197	9800	22x10.50B	22x10.50DB
Mack B Q	——	6800	Own	L	6	4¾x5¾	610.6	54.1	128@2200	G	Own	Own	Cle	Ross	Str	P	NE	Own	4	Own	2R	Opt	O4IV	618	191	10000	22x10.50B	22x10.50DB
Mack A K-4	——	5150	Own	L	4	5 x6	471.2	40.0	75@1800	G	Own	Own	Spic	Own	Str	Gra	NE	Own	4	Own	Ch	Opt	O4IV	492	174	9300	36x5S	36x5DS
Mack A K-4	——	5250	Own	L	4	5 x6	471.2	40.0	75@1800	G	Own	Own	Spic	Own	Str	Gra	NE	Own	4	Own	2R	Opt	O4IV	492	174	9400	36x5S	36x5DS
Mack A K-6	——	6450	Own	L	6	4¾x5¾	610.6	54.1	128@2200	G	Own	Own	Spic	Han	Str	P	NE	Own	4	Own	2R	Opt	O4IV	561	186	10400	22x10.50B	20x10.50DB
Mack A C-4-L	——	4950	Own	L	4	5 x6	471.2	40.0	75@1800	G	Own	Own	Spic	Own	Str	Gra	NE	Own	4	Own	Ch	Opt	OJXM	478	156	9100	36x5S	40x6DS
Mack A C-4-M	——	5500	Own	L	4	5 x6	471.2	40.0	75@1800	G	Own	Own	Spic	Own	Str	Gra	NE	Own	4	Own	Ch	Opt	OJXM	478	168	9800	36x6S	40x6DS
Mack A C-4-H	——	6000	Own	L	4	5 x6	471.2	40.0	75@1800	G	Own	Own	Spic	Own	Str	Gra	NE	Own	4	Own	Ch	Opt	OJXM	478	168	10150	36x7S	40x7DS
Mack A C-6	——	6450	Own	L	6	4¾x5¾	610.6	54.1	128@2200	G	Own	Own	Spic	Han	Str	P	NE	Own	4	Own	Ch	Opt	O4IV	755	186	11400	24x10.50B	24x10.50DB
Mack A P	——	8500	Own	L	6	5 x6	706.5	60.0	138@1900	G	Own	Own	Spic	Han	Str	Gra	NE	Own	4	Own	Ch	Opt	O2IV	284	191	11700	36x7S	40x8DS
Mack A K-6 6 wheel	——	9000	Own	L	6	4¾x5¾	610.6	54.1	128@2200	G	Own	Own	Cle	Han	Str	P	NE	Own	4	Own	2R	Opt	O6IV	1044	152-52	15600	22x9.75B	22x9.75DB
Mack A C-6 6 wheel	——	8500	Own	L	6	4¾x5¾	610.6	54.1	128@2200	G	Own	Own	Spic	Han	Str	P	NE	Own	4	Own	Ch	Opt	O6IV	1052	145-52	14300	40x8P	40x8DP
Mack A P 6 wheel	——	10500	Own	L	6	5 x6	706.5	60.0	138@1900	G	Own	Own	Spic	Han	Str	Gra	NE	Own	4	Own	Ch	Opt	O6IV	1052	145-52	14600	40x8P	40x8DP
Mack A P 6 wheel	——	11000	Own	L	6	5 x6	706.5	60.0	138@1900	G	Own	Own	Cle	Han	Str	Gra	NE	Own	4	Own	2R	Opt	O6IV	1044	152-52	15950	22x9.75B	22x9.75DB
Pierce-Arrow 13S 385	2	2500	Own	L	8	3¼x5	385.0	39.2	125@2800	C	Long	Long	Cle	Han	Str	P	DR	Cla	4	Tim	Sp	33.5	B4IM-T	399	160	6000	20x8.25B	20x8.25DB
Pierce-Arrow 12T 361	2-2½	2200	Her	L	6	4½x4¼	361.0	40.3	77@2400	G	Long	Long	Cle	Han	Zen	P	DR	Cla	4	Tim	Sp	34.3	B4IM	399	150	5625	20x7.50B	20x7.50DB
Pierce-Arrow 14T 298	2½	2150	Her	L	6	3⅜x4½	298.0	33.7	70@2600	G	Long	Long	Cle	Han	Zen	P	DR	Cla	4	Tim	Sp	40.0	B4IM	399	150	5725	20x8.25B	20x8.25DB
Pierce-Arrow 15T 361	2½	2300	Her	L	6	4½x4½	361.0	40.3	77@2400	G	Long	Long	Cle	Han	Zen	P	DR	Cov	4	Tim	Sp	34.4	B4IM	399	180	5800	20x8.25B	20x8.25DB
Pierce-Arrow 18W 361	3-4	3000	Her	L	6	4½x4½	361.0	40.3	77@2400	G	Long	Long	Cle	Han	Zen	P	DR	Cov	4	Tim	Wo	41.9	B4IA-T	473	150	6660	20x9.00B	20x9.00DB
Pierce-Arrow 18R 428	3-4	3600	Her	L	6	4⅜x4¾	428.0	46.0	94@2200	G	Long	Long	Cle	Han	Zen	P	DR	Cov	4	Tim	Wo	28.6	B4IA	473	150	6860	20x9.00B	20x9.00DB
Pierce-Arrow 21R 501	3½	3750	Her	L	6	4½x5¼	501.0	48.6	110@2200	G	Long	Long	Cle	Han	Zen	P	DR	Cov	4	Tim	Wo	36.0	B4IA	473	150	7050	20x9.75B	20x9.75DB
Pierce-Arrow 24X 501	4-5	4200	Her	L	6	4½x5¼	501.0	48.6	110@2200	G	Long	Long	Cle	Han	Zen	P	DR	Cov	4	Tim	Wo	40.2	T4IA	618	160	9250	20x10.50B	20x10.50DB
Pierce-Arrow 24M 611	4-5	5000	Her	L	6	4¾x5¾	611.0	54.1	130@2000	G	Long	Long	Spic	Ross	Str	P	DR	Own	4	Own	Wo	39.9	T4IA-T	618	160	10200	20x10.50B	20x10.50DB
Pierce-Arrow 28X 501	5½	4600	Her	L	6	4½x5¼	501.0	48.6	110@2200	G	Long	Long	Cle	Han	Zen	P	DR	Cov	4	Own	Wo	53 0	TO4IA	720	160	10675	24x10.50B	24x10.50DB
Pierce-Arrow 28M 611	5½	5400	Her	L	6	4¾x5¾	611.0	54.1	130@2000	G	Long	Long	Spic	Ross	Str	P	DR	Own	4	Own	Wo	52.5	TO4IA	720	160	11600	24x10.50B	24x10.50DB
Pierce-Arrow 28Y 479	5½	4400	Her	L	6	4⅝x4¾	479.0	51.3	104@2200	G	Long	Long	Cle	Han	Zen	P	DR	Cov	4	Own	Wo	53.0	TO4IA	720	160	10675	24x10.50B	24x10.50DB
Pierce-Arrow 34K 611	5½	——	Her	L	6	4¾x5¾	611.0	54.1	130@2000	G	Long	Long	Spic	Ross	Str	P	DR	Own	4	Own	Wo	42.0	TO4IA	720	170	11675	24x10.50B	40x8DS
Pierce-Arrow 75M 279T	*75000	6400	Her	L	6	5¼x6	779.0	66.1	150@1800	G	Long	Long	Spic	Ross	Str	P	DR	Own	4	Own	Wo	51.9	TO4IA	720	190	12750	24x10.50B	24x10.50DB
Pierce-Arrow 24T 361T	*24000	2400	Her	L	6	4½x4½	361.0	40.3	77@2400	G	Long	Long	Cle	Han	Zen	P	DR	Cov	4	Tim	Sp	48.1	B4IM	399	150	5725	20x8.25	20x8.25D
Pierce-Arrow 35R 428T	*35000	3800	Her	L	6	4⅜x4¾	428.0	46.0	94@2200	G	Long	Long	Cle	Han	Zen	P	DR	Cov	4	Tim	Wo	47.8	B4IA	473	150	7050	20x9.75	20x9.75D
Pierce-Arrow 45X 501T	*45000	4800	Her	L	6	4½x5¼	501.0	48.6	110@2200	G	Long	Long	Cle	Han	Zen	P	DR	Cov	4	Tim	Wo	57.2	T4IA	618	160	9300	20x10.50	20x10.50D
†Pierce-Arrow 34L 501S4	*34000	——	Her	L	6	4½x5½	501.0	48.6	110@2200	G	Long	Long	Cle	Han	Zen	P	DR	Cov	4	Tim	Wo	49.0	T6IA	1022	200	13200	20x9.75	20x9.75D
†Pierce-Arrow 44K 479S4	*44000	——	Her	L	6	5¼x6	779.0	66.1	150@1800	G	Long	Long	Spic	Ross	Str	P	DR	Own	4	Tim	Wo	47.2	T6IA	1022	200	14500	20x10.50	20x10.50D
†Pierce-Arrow 34K 611S4	*34000	——	Her	L	6	4¾x5¾	611.0	54.1	130@2000	G	Long	Long	Spic	Ross	Str	P	DR	Own	4	Tim	Wo	40.6	T6IA	1022	200 *	14200	20x9.75	20x9.75D
Reo 1 A	1½	625	Own	L	4	3⅛x4½	205.0	23.3	51@2500	G	Per	Long	Cle	Ross	Zen	P	DR	Cla	4	Cla	Sp	37.1	L4IH	230	136	2930	20x6.00	32x6
Reo 1 C	1½	665	Own	L	4	3⅛x4½	205.0	23.3	51@2500	G	Per	Long	Cle	Ross	Zen	P	DR	Cla	4	Cla	Sp	37.1	L4IH	230	160	3020	20x6.00	32x6
Reo 1 B	1½	745	Own	L	6	3¼x5	230.0	23.4	68@2800	C	Own	Long	Cle	Ross	Zen	P	DR	Cle	4	Own	Sp	34.8	L4IH	246	140	3100	20x6.00B	32x6
Reo 1 D	1½	765	Own	L	6	3¼x5	230.0	23.4	68@2800	C	Own	Long	Cle	Ross	Zen	P	DR	Cla	4	Cla	Sp	37 1	L4IH	230	164	3200	20x6.00	32x6
Reo D F X	1½	1095	Own	L	6	3⅜x5	268.3	27.3	85@3200	C	Own	Long	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	34.1	L4IH	289	135	3200	20x6.00	20x6.00
Reo F A X	2	1295	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	Own	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	34.3	L4IH	289	137	3525	20x6.00	32x6
Reo F E X	2	1395	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	Own	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	34.3	L4IH	289	152	3700	20x6.00	32x6
Reo F F X	2	1395	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	Own	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	34.3	L4IH	289	156	3525	20x6.00	32x6
Reo F H X	2½	1595	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	MeC	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	37.7	L4IH	289	142	3750	32x6	32x6D
Reo F C X	2½	1645	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	MeC	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	37.7	L4IH	289	152	4165	32x6	32x6D
Reo F D X	2½	1745	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	MeC	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	37.7	L4IH	289	168	4075	32x6	32x6D
Reo G A	3	2035	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	MeC	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	40 5	L4IH-T	344	163	4625	32x6	32x6D
Reo G C	3	2140	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	MeC	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	40.5	L4IH-T	344	179	4850	32x6	32x6D
Reo G D	3	2085	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	MeC	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	78.1	L4IH-T	344	144	4650	32x6	32x6D
Reo G C S	3	2375	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	MeC	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	40.5	L4IH	344	210	5300	32x6	32x6D
Reo 4-H	4	2800	Own	L	6	4⅛x4¾	381.0	40.8	101@2600	G	MeC	Long	Cle	Ross	Sch	P	DR	Own	4	Cla	Sp	42.4	L4IHV-T	390	150	6150	20x8.25	20x9.00B
Reo 4-J	4	2875	Own	L	6	4⅛x4¾	381.0	40.8	101@2600	G	MeC	Long	Cle	Ross	Sch	P	DR	Own	4	Cla	Sp	42.4	L4IHV-T	390	170	6280	20x8.25	20x9.00B
Reo 4-K	4	2950	Own	L	6	4⅛x4¾	381.0	40.8	101@2600	G	MeC	Long	Cle	Ross	Sch	P	DR	Own	4	Cla	Sp	42.4	L4IHV-T	390	190	6395	20x8.25	20x9.00B
Stewart 30	1	695	Lyc	L	4	3¾x4½	199.0	22.5	50@2600	G	Fed	Borg	Spic	Ross	Str	P	DR	W-G	4	Cla	Sp	35 1	B4IM	257	130	*3158	20x6.50	20x6.50
Stewart 30 X	1	795	Lyc	L	6	3 x4¾	201.5	23.8	60@2800	G	Fed	Borg	Spic	Ross	Str	P	DR	W-G	4	Cla	Sp	35.1	B4IM	257	130	3199	20x6.50	20x6.50
Stewart 42 X	1½	795	Lyc	L	6	3¼x4½	224.0	25.3	62@2600	G	Fed	Borg	Spic	Ross	Zen	P	DR	W-G	4	Cla	Sp	35.1	B4IM	257	134	3525	20x6.50	20x6.50
Stewart 40 X A	1½	995	Lyc	L	6	3¼x4½	224.0	25.3	62@2600	G	Fed	Borg	Spic	Ross	Zen	P	DR	W-G	4	Cla	Sp	——	B4IM	257	145	3574	20x6.50	20x6.50D
Stewart 43 X	2	995	Lyc	L	6	3¼x4½	242.0	27.3	62@2800	G	Fed	Borg	Spic	Ross	Zen	P	DR	W-G	4	Cla	Sp	35.1	B4IM	257	145	4375	20x6.50	20x6.50DB
Stewart 50 X	2	1195	Lyc	L	6	3¾x4½	242.0	27.3	65@2800	G	Fed	Borg	Spic	Ross	Zen	P	DR	W-G	4	Cla	Sp	35.1	B4IM	257	145	4165	20x6.50	20x6.50DB
Stewart 29 X S	2	1695	Lyc	L	6	3¾x4½	298.0	33.7	85@2750	G	Fed	Ful	Spic	Ross	Str	P	DR	Ful	4	Cla	Sp	44.1	B4IM	307	145	5194	20x7.00	20x7.00D
Stewart 32 X	2½	1990	Lyc	L	6	3¾x4½	298.0	33.7

OUTLINE OF METHODS USED BY BIG FLEET OPERATORS IN TRAINING DRIVER - SALESMEN

(Continued from Page 13)

4. Quality of the work.
5. Nice route man.
6. Nice company.
7. Good equipment to handle the work.

The meeting was opened with a brief summary of the previous session. The objective of the current meeting was then stated: To determine the best procedure for soliciting our service in accordance with the two premises, and the customer's interests listed on the blackboard. The men were then asked what they considered the best way of satisfying interest No. 1. One man and then another volunteered to tell what they would say or do. Soon a half-dozen different and conflicting suggestions had been offered and noted on the blackboard. It soon became evident that some men were not clear as to what the service really consisted of, and that others were by no means using the best methods in soliciting, or in accepting, this service. Thus the task resolved itself, first, into working out a definition and classification of the service, and, second, a simple and effective way to solicit or accept it. As each man gave his ideas or cited his experiences, they were written on the blackboard by the manager. All were then rearranged in an orderly manner, with omissions and combinations in several instances. This took up the entire hour, but resulted in clearing up many faulty impressions, clarifying ideas, and in developing a simple, efficient procedure for selling that service in the future.

In commenting later upon this meeting, the general manager said:

"Sales plans developed in this way are invaluable. The men use them because they claim them as their own. They feel that they have made them.

"My job is to keep the meeting under control, limit the discussion to the question and co-ordinate the thoughts of the various salesmen. I make no attempt to directly tell the men anything, except in a few cases where there appears to be a general misunderstanding of a fact or company policy. Now and then I make suggestions but, generally I let the men work out the solution for the particular problem with which they may be struggling.

"One of my chief duties is to make sure that the discussion at all times reflects the policies of the company. The outline on the blackboard is constantly referred to for this purpose. Thus, in the meeting today, one man said that if he called when the customer was out and hadn't received word from her as to what service she wanted, he would guess as to what she desired and explain the circumstances when he made delivery. 'Now, what is our premise?' I asked him. The man looked at the blackboard, read premise No. 2 and said, 'I can never assume to know what the customer's interests are.' 'If you can never assume to know what the customer's interests are, then what should you do when you are in doubt as to the kind of service she wants?' I inquired. On reflecting, the man was forced to conclude that he either would have to telephone or call back. By such methods as this, the ideas and methods of our men are continuously being developed and brought into line with our company policies."

This company employs several hundred route salesmen.

CHRYSLER PROTESTS BURDENING FARMER WITH NEW MOTOR TAXES

(Continued from Page 1)

asked to bear the largest share of any increased load.

"The tax on motor vehicles is not levied against the manufacturer but against the purchaser. It hits the farmer particularly hard because this group is the largest user of motor vehicles and also because he is more dependent than any other class on motor transportation in his business, his pleasure and the education of his children.

"We bespeak the intelligent consideration of the farmer's problems and the closely allied problems of the automotive industry by both political parties. These two great industries are fundamentally sound and vigorous and they ask only a fair chance to work out their own salvation."

CLASSIFIED ADVERTISEMENTS IN THE AUTOMOTIVE DAILY NEWS BRING RESULTS

BEECHER APPOINTED CHIEF ENGINEER OF THE GABRIEL COMPANY

(Continued from Page 1)

master mechanic at the Liberty engine plant of Trego Motors, in New Haven, Conn. Prior to that, he was assistant to Lester P. Barlow in the development of aeronautical bombs by the Marlin-Rockwell Corporation. Mr. Beecher's engineering activities have long been allied with the automotive industry, as he was among the early engineering authorities to foresee the importance of adequate ride control. In the development of Gabriel hydraulic shock absorbers Mr. Beecher has laid a great deal of stress upon the creation of shock absorbers that would be permanently free from oil leakage.

PUBLIC HEARING ON BUS AND TRUCK IN VA. SET FOR JULY 25

(Continued from Page 1)

the corporation commission to adopt rules and regulations governing the supervision, control and operation of motor vehicle carriers; and such rules have been promulgated subject to the hearing now ordered for July 25.

The authority under which the commission is acting in the matter is found in chapters 339, 359 and 360 of the acts of the last General Assembly quoted as the Virginia motor vehicle law.

DRASTIC INDIANA TRUCK CONTROL LAWS EFFECTIVE TOMORROW

(Continued from Page 1)

No load on any vehicle or combination of vehicles shall extend more than three feet beyond the front thereof.

No vehicle shall carry any load on the running board on the left side of such vehicle extending more than six inches beyond the line of the fenders.

No vehicle shall be driven or moved on any highway unless such vehicle is so constructed or loaded as to prevent its contents from dropping, sifting, leaking or otherwise escaping therefrom.

Numerous other regulations, including provisions for bumpers, lights, reflectors and other equipment, are contained in the act, which was sponsored by the State Highway Commission in the last Legislature.

ROCKNE DELIVERIES UP FOR 20 DAYS OF JUNE

(Continued from Page 1)

tions among all makes in Pomona, Cal., and fourth among all makes in Houston as wel las Long Beach, San Bernardino and Sacramento, Cal.

"In Dallas, San Francisco and Toledo, we ranked in fifth place in May, while we placed sixth in Fresno and seventh in Los Angeles. We were also eighth in Baltimore, Fort Worth, New Orleans, St. Paul and Sioux City; ninth in Lincoln, Omaha and Seattle, and tenth in Denver, Portland, Oregon, and Atlanta."

Major Specifications and Mechanical Details of 1932 Commercial Cars

LEADING MAKES NATIONALLY DISTRIBUTED

(Continued from Page 14)

Make and Model	Capacity—Tons or Lbs.	Chassis Price	Engine	Valve Arr'g'm't	No. of Cyls.	Bore and Stroke	Piston Disp.	Tax H. P.	Max. Brake H. P. and Peak R. P. M.	Type Camshaft Drive	Radiator Make	Clutch Make	Universals Make	Steering Gear Make	Carburetor Make	Fuel Feed Type	Make Electr'l System	Transmission	No. Spds. For.	Rear Axle Make	Rear Axle Type	Final Drive	Final Gear Reduction	Type Service Brakes	Area Service Brake Lining	Standard Wheel Base	Chassis Wgt.	Standard Tire Sizes Front	Standard Tire Sizes Rear
White 51 A	*17000	3750	Own	L	4	4¼x5¾	326.0	28.9	54@1600	G	Own	Own	Spic	Own	Zen	Vac	Eis	Own	4	Own	Sp		35.6	O2IM	335	170	6438	36x5.00P	36x8.00S
White 630 L	*17000	5000	Own	H	6	4 x5¼	396.0	38.4	92@2100	C	Own	Own	Spic	Ross	Zen	P	DR	Own	4	Own	Sp		37.3	L4IHV	553	157	8500	20x9.00B	20x9.00DB
White 618 A	*18000	3600	Own	L	6	3¾x4½	299.0	33.7	77@2400	C	Own	Own	Spic	Ross	Zen	Vac	DR	Own	5	Own	2R		57.2	L4IHV	349	166	6675	20x9.00B	20x9.00DB
White 621	*18000	4650	Own	H	6	4 x5¼	396.0	38.4	92@2100	C	Own	Own	Spic	Ross	Zen	P	DR	Own	4	Own	Sp		41.4	OL4IHV	484	157	7945	20x9.00B	20x9.00DB
White 640	*20000	6100	Own	H	6	4⅜x5¾	519.0	45.9	118@2100	C	Own	Own	Spic	Ross	Zen	P	L-N	Own	4	Own	Sp		33.9	O4IA	553	180	9200	20x9.00B	20x9.00DB
White 630	*20000	5000	Own	H	6	4 x5¼	396.0	38.4	92@2100	C	Own	Own	Spic	Ross	Zen	P	DR	Own	4	Own	Sp		41.4	O4IHV	553	168	8500	20x9.00B	20x9.00DB
White 58	*22000	4400	Own	L	4	4¼x5¾	326.0	28.9	54@1600	G	Own	Own	Spic	Own	Zen	vac	Eis	Own	4	Own	2R		49.7	OPXM	224	180	7797	36x5	36x5SD
White 630 A	*22000	5000	Own	H	6	4 x5¼	396.0	38.4	92@2100	C	Own	Own	Spic	Ross	Zen	P	DR	Own	4	Own	Sp		41.4	O4IHV	553	168	6500	20x9.00B	20x9.00DB
White 641	*24000	6450	Own	H	6	4⅜x5¾	519.0	45.9	118@2100	C	Own	Own	Spic	Ross	Zen	P	L-N	Own	4	Own	2R		46.9	O4IA	595	180	9700	20x9.75B	20x9.75DB
*White 630 SW200	*24000	6245	Own	H	6	4 x5¼	396.0	38.4	92@2100	C	Own	Own	Spic	Ross	Zen	P	DR	Own	4	Tim	Wo		44.2	OTIHV	514	193	10000	20x8.25B	20x8.25DB
White 631	*24000	5750	Own	H	6	4 x5¼	396.0	38.4	92@2100	C	Own	Own	Spic	Ross	Zen	P	DR	Own	4	Own	2R		56.9	O4IHV	595	168	9600	20x9.25B	20x9.25DB
*White 642 SW310	*34000	8025	Own	H	6	4⅜x5¾	519.0	45.9	118@2100	C	Own	Own	Spic	Ross	Zen	P	L-N	Own	4	Tim	Wo		55.6	OTIA	588	198	12670	20x9.00B	20x9.00DB
White 58 SS	*30000	5300	Own	L	4	4¼x5¾	326.0	28.9	54@1600	G	Own	Own	Spic	Ross	Zen	Vac	L-N	Own	4	Own	2R		66.5	O4IA	623	180	10900	24x10.50B	24x10.50DB
White 643	*32000	6950	Own	H	6	4⅜x5¾	519.0	45.9	118@2100	C	Own	Own	Spic	Ross	Zen	P	L-N	Own	4	Own	2R		66.5	O4IA	623	180	10600	24x9.75B	24x9.75DB
White 642	*28000	6750	Own	H	6	4⅜x5¾	519.0	45.9	118@2100	C	Own	Own	Spic	Ross	Zen	P	L-N	Own	4	Own	2R		66.5	O4IA	623	180	10600	24x9 75B	24x9 75DB
*White 643 SW410	*40000	8550	Own	H	6	4⅜x5¾	519.0	45.9	118@2100	C	Own	Own	Spic	Ross	Zen	P	L-N	Own	4	Tim	Wo		69.1	OTIA	588	198	14400	40x8	40x8D
Willys-Overland 6-C-113	½	415	Own	L	6	3¼x3⅞	193.0	25.3	65@3400	C	Fed	Own	Spic	Own	Til	P	Aut	Own	3	Own	Sp		12.4	B4IM	143	113	1925	19x6.00	19x6.00
Willys-Overland 6-C-131	1½	595	Own	L	6	3¼x3⅞	193.0	25.3	65@3400	C	Fed	Own	Spic	Own	Til	P	Aut	W-G	4	Cla	Sp		40.8	B4IM	235	131	2750	20x5.50	42x6
WillysOverland 6-C-157	1½	635	Own	L	6	3¼x3⅞	193.0	25.3	65@3400	C	Fed	Own	Spic	Own	Til	P	Aut	W. G	4	Cla	Sp		40.8	B4IM	235	157	2900	20x5.50	32x6

GENERAL NOTATIONS

***†REFERENCE MARKS** apply to individual lines only and explanations are given under the subdivision for each company in the "SPECIAL NOTATIONS."

CAPACITIES given in this table are in tons or fractions of tons. *Shows maximum allowable gross weight in pounds.

ENGINE—Bud, Buda; Con, Continental; Her, Hercules; Lyc, Lycoming; Pont, Pontiac; Wak, Waukesha; Wis, Wisconsin; Hall, American Car & Foundry; Ster, Sterling Engine Co.

VALVE ARRANGEMENT—L, "L" head; H, in head, O, overhead; S, sleeve.

TYPE OF CAMSHAFT DRIVE—G, gear; C, chain.

RADIATOR MAKE—G&O, G & O Mfg. Co.; Per, Perfex Corp.; Long, Long Mfg. Co.; Har, Harrison Radiator Corp.; Fed, Fedders Mfg Co.; McC, McCord Radiator & Mfg Co.; Mod, Modine Mfg. Co.; Hex, Hexcel Radiator Co. Yo-Young.

CLUTCH MAKE—Jon, Jones Cluten & Gear Co.; Ful, Fuller & Sons Mfg. Co.; Borg, Borg & Beck Co.; Br-L, Brown Lipe Gear Co.; Rock, Rockford Drill & Machine Co.; Cov, Covert Gear Co.; Long, Long Mfg. Co.; Detr, Detroit Gear & Machine Co.; Mer, Merchant & Evans; Hel, Merchants & Evans.

UNIVERSALS MAKE — Spic, Spicer Mfg Co.; Blo, Blood Bros. Machine Co.; Sup, Superior Universal Products; Un, Universal Products Co.; Cle, Cleveland Steel Products Corp.; Pet, Peters; Opt, Optional; Mec, Mechanics Machine Co.

STEERING GEAR MAKE—Ross, Ross Gear & Tool Co.; Han, Hannum Mfg. Co. Sag, Sagmaw Steering Gear Co.; Gem, Gemmer Mfg. Co.; Col, Columbus Gear Pump Co.; W-G, Warner Gear Corp.

CARBURETOR—Car, Carter; Mar, Marvel; Sch, Wheeler-Schebler; Str, Strombers; DL, Detoit Lubricator; Til, Tillotson; Zen, Zenith-Detroit.

FUEL FEED—Gra, gravity; Vac, vacuum tank, P, fuel pump.

ELECTRICAL SYSTEM — AB, American-Bosch; Aut, Electric Auto-Lite; Eis, Eisemann; L-N, Leece-Neville; NE, North East; RB Robert Bosch; DR, Delco-Remy.

TRANSMISSION—Br-L, Brown-Lipe; Cov, Covert; Ful, Fuller; Mec, Mechanics Machine; Mun, Muncie; W-G, Warner Gear; Cot, Cotta Gear Co.; Cla, Clark Equipment Co.

REAR AXLE—Cla, Clark Equipment; Col, Columbia; Eat, Eaton; Pont, Pontiac; Sal, Salisbury; Tim, Timken; Wis, Wisconsin.

FINAL DRIVE—IG, internal gear; St, straight bevel; Sp, spiral bevel; Wo, worm; 2R, double reduction; Ch, chain; S-T, semi-transverse.

TYPE OF SERVICE BRAKES—

B4IM, Bendix, 4 wheel, internal mechanical; B4MV, Bendix, 4 wheel, mechanical, vecuum; B6IA, Bendix, 6 wheel, internal, air; B4IMV, Bendix, 4 wheel, internal, mechanical, vacuum; BO4IMV, Bendix, own, 4 wheel, internal, mechanical, vacuum; BrIA, Bendix, operating on 4 rear wheels, internal air; BW4IM, Bendix front, Wisconsin rear, 4 wheel, internal, mechanical; BE4IM, Bendix front, Eaton rear, 4 wheel, internal, mechanical; B4IH, Bendix, 4 wheel, internal, hydraulic.

CB4IM, Columbia, Bendix, 4 wheel, internal, mechanical; C4IM, Columbia, 4 wheel, internal, mechanical; K2IM, Clark, 2 wheel, internal, mechanical; CR4IA, Christensen-Relay, 4 wheel internal, air.

L4IHVA, Lockheed, 4 wheel, internal, hydraulic, vacuum, air; LO4ID, Lockheed, own, 4 wheel, internal, drive shaft; LO4IV, Lockheed, own, 4 wheel, internal, vacuum; LT4DV, Lockheed, Timken, 4 wheel, drive shaft, vacuum; L4IH, Lockheed 4 wheel, internal, hydraulic; L4IHA, Lockheed, 4 wheel, internal, hydraulic, air; L4IHV, Lockheed, 4 wheel, internal, hydraulic, vacuum; LT4IHV, Lockheed, Timken, 4 wheel, internal, hydraulic, vacuum; LT4IVA, Lockheed, Timken, 4 wheel, internal, vacuum, air; L6IHV, Lockheed, 6 wheel, internal, hydraulic, vacuum; L6IH, Lockheed, 6 wheel, internal, hydraulic.

O2IM, Own, 2 wheel, internal, mechanical; O2IV Own, 2 wheel, internal, vacuum; O4IA, Own, 4 wheel, internal, air; O4IH, Own, 4 wheel, internal, hydraulic; O4IHV, Own, 4 wheel internal, hydraulic, vacuum; O4IM, Own, 4 wheel, internal, mechanical; O4IV, Own, 4 wheel, internal, vacuum; O4M, Own, 4 wheel, mechanical; O2XM, Own, 2 wheel, external, mechanical; O4XM, Own, 4 wheel external, mechanical; O6IA Own, 6 wheel, internal, air; OJXM, Own, jack shaft, external, mechanical; OL4IHV, Own, Lockheed, 4 wheel, internal, hydraulic, vacuum; OPX, Own, propeller shaft, external; OPXM, Own, propeller shaft, external, mechanical; OPM, Own, propeller shaft, mechanical; ORIV Own, rear wheels, internal, vacuum; OTIHV, Own Timken, internal, hydraulic, vacuum.

S4IM, Steeldraulic, 4 wheel, internal, mechanical.

T4rIA, Timken, operating on 4 rear wheels, internal, air; T4IA, Timken, 4 wheel, internal, air; T6IA, Timken, 6 wheel, internal, air; T2IMV, Timken, 2 wheel, internal, mechanical, vacuum.

W4I, Westinghouse, 4 wheel, internal; W4IA, Westinghouse, 4 wheel, internal, air; W6IA, Westinghouse, 6 wheel, internal, air; 4IA, 4 wheel, internal, air; 4IH 4 wheel, internal, hydraulic; 4M, 4 wheel, mechanical.

-T, Tru-stop. *Models on which Tru-stop is optional.

WHEEL BASES given are standard, but optional wheel bases are available in many cases.

***CHASSIS WEIGHT** according to Automotive Daily News formula, which is the chassis with gas, oil, water and spare tire, but without cab or other equipment.

TIRES—B, balloon; D, dual; S, solid; P, pneumatic.

SPECIAL NOTATIONS

AUTOCAR

†Engines in these models are located under the driver's seat.

*Six-wheeler.

Model H also available on 171 and 189 inches wheel base.

BROCKWAY

*Models equipped with twin ignition.

CHEVROLET

Utility model available on 131-inch wheel base with chassis weight of 2,760 pounds and equipped with dual rear wheels.

DIAMOND T

*Six-wheelers.

Additional standard wheel bases available as follows:—

551	158	750	167, 192
504	166½	801	180½, 199¼
506	174	1200	174½, 180
603	157, 179	1600	174½, 180
606	177½	1601	184

DODGE

*Models F40, F41, F61 and F62 can be had with double drop frame.

†Six wheelers.

FEDERAL

*Six-wheelers.

*Also rated in pounds of total allowable weight as follows:

D 3	8500	T 10 W	18,000
E 3	8,500	T 10 D R	18,000
F 7	10,000	U 6	21,000
F 8	11,500	U 6 D R	21,000
A 6	13,500	A 6 S W	18,500
A 6 T	15,000	C 7	24,000
A 6 T W	15,000	C 7 W	24,000
T 3 W	14,000	C 8	24,000
T 8 W F	15,000	C 8 W	24,000
D 2 S W	12,500	X 8	30,000
E 2 S W	12,500	X 8 D R	30,000
D 2 D	12,500	X 8 R	30,000
2 E D	12,500	X 8 R D R	30,000
T 10 B	18,000		

†Both the four and six cylinder are also offered in 157-inch wheel ase at $1,145 and $1,345, respectively.

Model T 10 SW also available in 206 and 224 inch wheel bases.

GENERAL MOTORS TRUCK

†Capacity indicated is the Shraight Rating (combined weight of chassis body, equipment and pay load) for which each chassis is designed and guaranteed to satisfactorily operate under average conditions. The size of the tires used does not affect this Straight Rating, but to secure maximum tire mileage it is suggested that the total gross weight be limited to a "recommended gross weight" for each tire equipment based on tire capacity. Prices cover base chassis and vary with wheel base and tire combinations. The number of wheel base lengths, tire types, range of "recommended gross weights" and resulting pay load range (assuming nominal body allowance) for each model follows:—

Note: Models T-15 to T-61, inclusive, are available for export only as coach chassis.

Model	Wheel Bases	Tire Types	Range of "Rec. Gross Weights"	Pay Load Range
T-15	3	10	4500- 6500	½-1½
T-18	.	..	7500- 8200	1½-2
T-19	4	..	7500-10000	1½-2½
T-23	2	..	8500-10000	2-3
T-25	3	17	6800- 9000	1½-2
T-26	4	..	8500-11000	2-5
T-30	3	15	10000-12500	2-3
T-31	4	..	11000-14000	2½-4
T-42	4	12	12000-15000	2½-4
T-44	4	12	12000-16000	3-4½
T-45	4	..	13500-16000	3-4½
T-51	4	..	16500-19000	4-5½
T-60	4	18	18500-22000	5-6½
T-61	4	..	19500-22000	5-6½
T-82	4	12	19000-24000	5-7
T-83	4	..	20000-24000	5-7
T-85	3	..	25000-30000	6-8
T-90	3	7	25000-28000	5-7½
T-95	3	..	30000-40000	7-11

Optional rear axle gear ratios available for all models, except Model T-18. Double reduction axles available for Models T-45, T-51, T-60, T-61, T-82, T-83 and T-95.

GRAMM

Series	Straight Rating	Wheel Base	Pay Load Range
AX 4	8,000	157	1 to 1½ tons
AX 6	8,000	157	1 to 1½ tons
BX 4	10,000	157	1½ to 2 tons
BX 6	10,000	157	1½ to 2 tons
CX 4	12,000	157-180	2 to 3 tons
CX 6	12,000	157-180	2 to 3 tons
B	12,000	157-174	1¾ to 2½ tons
C	14,000	145-196	2 to 3 tons
D	17,000	145-196	2½ to 4 tons
E	20,000	145-224	3 to 4½ tons
EY	.....	.....	3 to 4 tons
G	24,000	165-235	4 to 6 tons
G S	24,000	165-235	4 to 6 tons
GY	.....	.....	4 to 5 tons
GW	28,000	157-240	5 to 7½ tons
HY	.....	.....	5 to 6½ tons

†Both the four and six-cylinder are also offered in 157-inch wheel base at $1,145 and $1,345, respectively.

INDIANA

*Six-wheelers.

PIERCE-ARROW

*Optional final drive on Models PW, PX, PY and PZ.

†Six wheelers.

REO

Models DF, FA, FE and FF are available with dual wheels at additional cost.

*Model DF X can be had with 3 speed transmission and single tires for $895.

Model 1 D can be secured in 164 inch wheel base at $785.

STEWART

Models 30 and 30X can also be supplied in 120, 140 and 160-inch wheel base.

Models 40XA can also be supplied in 134, 145, 160 and 176-inch wheel base.

Model 29XS can be supplied in 135, 160, 176 and 190-inch wheel base.

*Models 18X and 32X can be supplied in 148, 190 and 220-inch wheel base.

*Models 19X, 31X and 27XS can be supplied in 148, 172, 190, 220 and 235-inch wheel base.

As optional equipment Models 18X, 19X, 31X and 27XS can be supplied with Timken dual reduction rear axle.

Models 38-8, 38-6, 48-8 and 58-8 can be supplied in 160, 170, 180, 196, 226 and 241-inch wheel base and worm axle.

WHITE

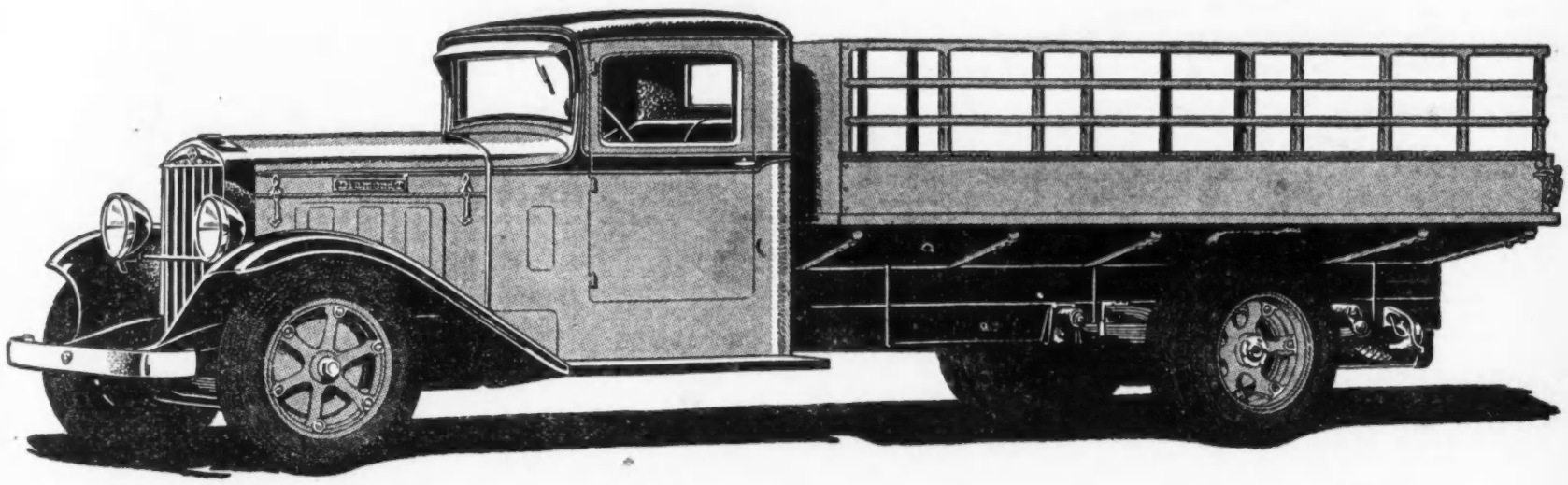
Six-wheelers.

CLASSIFIED ADVERTISEMENTS IN THE AUTOMOTIVE DAILY NEWS BRING RESULTS

DIAMOND·T

registrations for the first 4 months

13% *ahead*



Not so important to you as

the reasons why

DIAMOND T dealers are again selling more trucks this year than last. They have what the buyers want.

They have, to begin with, the World's Greatest Truck Value, the big, heavy-duty 1½-ton at $595.00. They have a complete line of outstanding truck values, all the way up. Every model is a positive and unanswered challenge in its field.

News like this spreads fast in a buyer's market. In the 22 years that Diamond T has built heavy-duty trucks there has never been a time when buyers dug in for facts as they do today.

That's the big break for Diamond T dealers. They are giving more for the money, and they can *prove* it.

We can *prove* it to you.

The Diamond T franchise is attracting the better truck and passenger car dealers daily. Wire or write—today! We will be glad to give you the facts.

It's easier to sell the World's Greatest Truck Value!

$595
Standard Chassis, at the factory

1½-ton, 8500 pounds gross capacity—6-cylinder, 228 cubic inch engine, delivering 60 honest truck horsepower (over 80 horsepower on dynamometer test)—Full-floating rear axle—Hydraulic brakes with cast drums and special moulded lining (finest and most expensive brakes ever used on a truck of this size)—4-speed truck transmission—springs mounted in compressed rubber, never rattle, need no lubricant—heavy frame—oversize heavy-duty clutch—finest cam and lever steering—wheelbases 135½ and 158 inches, for bodies to 11 feet.

DIAMOND T MOTOR CAR COMPANY
West Twenty-Sixth Street, Chicago, Ill.

$795	$995	$1595	$1995
NEW 1¾-TON	NEW 2-TON	NEW 3-TON	NEW 4-TON

(Prices, standard chassis, at the factory)

DIAMOND·T